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TRANSCRIPT OF RECORD.

SUPREME COURT OF THE UNITED STATES.

OCTOBER TERM, 1885.

No. 204.

THE NEW YORK AND COLORADO MINING SYNDICATE AND COMPANY, PLAINTIFF IN ERROR,

vs.

DAVID R. FRASER, THOMAS CHALMERS, WILLIAM J. CHALMERS, AND NORMAN D. FRASER.

IN ERROR TO THE CIRCUIT COURT OF THE UNITED STATES FOR THE DISTRICT OF COLORADA.

FILED NOVEMBER 13, 1885.

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DAVID R. FRASER, THOMAS CHALMERS, WILLIAM J. CHALMERS, AND NORMAN D. FRASER.

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1 Pleas in the circuit court of the United States for the district of Colorado, sitting at Denver.

Be it remembered that heretofore and on, to wit, the 17th day of January, A. D. 1883, came David R. Fraser and Thomas Chalmers, by Amos Steck, Esq., their attorney, and filed in said court their complaint and sued out of said court a writ of summons against the New York and Colorado Mining Syndicate and Company; and the said complaint is in words and figures as follows, to wit:

Complaint.

UNITED STATES OF AMERICA, } ss:
District of Colorado, }

In the Circuit Court of the United States for the District of Colorado.

DAVID R. FRASER and THOMAS CHALMERS, Copartners, Trading and Doing Business under the Firm Name and Style of Fraser & Chalmers, Plaintiffs,

vs.

THE NEW YORK AND COLORADO MINING SYNDICATE AND COMPANY, Defendant.

2 David R. Fraser and Thomas Chalmers, who are citizens of the State of Illinois, trading and doing business under the firm name and style of Fraser & Chalmers, sue the New York and Colorado Mining Syndicate and Company, a citizen of the State of Colorado, defendant, incorporated by the name aforesaid by the said State and having its principal place of business therein, and for cause of action state as follows, to wit:

I. For that whereas the said defendant, The New York and Colorado Mining Syndicate and Company, on, to wit, the 2d day of December, A. D. 1882, at New York, in the State of New York, made its certain promissory note in writing, commonly called a promissory note, subscribed by the said defendant, by Hugh J. Jewitt, its president, and its corporate seal attached, and attested by James C. Spencer, its secretary and treasurer, bearing date the day and year last aforesaid, and then and there delivered the said promissory note to the said plaintiffs, by which said promissory note the said defendant then and there promised to pay, thirty days after the date thereof, to the said plaintiffs or order the sum of one thousand dollars for value received; by means whereof the said defendant then and there became liable to pay to the said plaintiffs the said sum of money in the said promissory note specified according to the tenor and effect thereof; and, being so liable to the said plaintiffs, the defendant, in consideration thereof, then and there promised the said plaintiff to pay the said sum of money to them according to the tenor and effect of the said promissory note.

II. And for a further, different, and other cause of action against

the said defendant the plaintiffs allege that the said defendant
3 afterwards, to wit, on the 30th day of December, A. D. 1883, was indebted to the said plaintiffs in the further sum of twenty-five hundred and thirty-one $\frac{78}{100}$ dollars, for the price and value of goods, wares, and merchandise sold and delivered to the said defendant; and, being so indebted, the defendant, in consideration, afterwards, to wit, on the day and year last aforesaid, promised the plaintiff- to pay them the said last mentioned sum of money when thereafter requested; yet the said defendant, disregarding its said several promises, respectively, wholly failed to pay the said several sums of money or any of them or any part thereof in the several counts of this complaint alleged, and still refuses to pay the same or either or any part thereof; whereupon the plaintiffs demand judgment against the said defendant in the sum of thirty-five hundred and thirty-one $\frac{78}{100}$ dollars, with interest on one thousand dollars after the 4th day of January, A. D. 1883, and interest on the twenty-five hundred and thirty-one $\frac{78}{100}$ dollars since the first day of January, A. D. 1883, and for their costs and charges laid out and expended.

(S'g'd) AMOS STECK,
Attorney for Plaintiffs, David R. Fraser and Thomas Chalmers.

(Endorsed:) No. 1102. David R. Fraser and Thomas Chalmers, pl'ffs, *vs.* The New York and Colorado Mining Syndicate and Company, d'f't. Complaint. Filed Jan. 17, 1883. (S'g'd) Edward F. Bishop, clerk. Amos Steck, pl'f's' att'y.

4 And the said summons is in words and figures as follows, to wit:

Summons.

UNITED STATES OF AMERICA, *District of Colorado,* } *ss:*

In the Circuit Court of the United States for the District of Colorado.

DAVID R. FRASER and THOMAS CHALMERS, Copartners, Trading and Doing Business under the Firm Name and Style of Fraser & Chalmers, Plaintiffs,

versus

THE NEW YORK AND COLORADO MINING SYNDICATE AND COMPANY, Defendant.

Complaint. Filed in the clerk's office this 17th day of January, A. D. 1883.

The President of the United States of America to the above-named defendant, Greeting:

You are hereby notified that an action has been brought in said court by the above-named plaintiffs against you as defendant to re-

cover the sum of $3,531.78 due from you, the said defendant, to the said plaintiffs on a certain promissory note for $1,000 signed by you, the said defendant, and dated at New York, in the State of New York, December 2d, 1882; and also for the price and value of goods, wares, and merchandise sold and delivered to defendant by plaintiffs, as more fully appears by the complaint on file herein and to which reference is here made, together with interest on $1,000 after the 4th day of January, A. D. 1883, and interest on $2,531.78 since the 1st day of January, A. D. 1883, and for the costs of this suit.

You are hereby required to appear and demur or answer to the complaint filed in said action in said court within ten days (exclusive of the day of service) after this summons shall be served on you, if such service shall be made within the county of Arapahoe; otherwise within forty days from the day of service; and if you fail so to do the said plaintiff will take judgment against you by default, according to the prayers of the said complaint, for said sum of $3,531.78, interest as aforesaid, and costs.

Witness the Honorable Morrison R. Waite, Chief Justice of the Supreme Court of the United States, and the seal of the said circuit court, at the city of Denver, in said district, this 17th day of January, A. D. 1883, and of the Independence of the United States the 107th year.

[Seal Cir. Ct. U. S., Colorado.]

(S'g'd) EDWARD F. BISHOP, *Clerk*,
By WM. E. ROGERS,
Deputy Clerk.

Proof of Service.

UNITED STATES OF AMERICA, *District of Colorado*, } *ss:*

DENVER, *Jan. 27th, A. D.* 1883.

I hereby certify that I received the within writ on the 18th day of January, A. D. 1883, and that I have personally served the same upon the said defendant, The New York and Colorado Syndicate and Mining Company, by delivering to George K. Sabin, their superintendent, personally, a true copy of the within writ at the day and time as follows: At Denver, county of Arapahoe, on the 27th day of January, A. D. 1883.

This writ therefore returned executed as the law directs this 27th day of January, A. D. 1883.

(S'g'd) WALTER A. SMITH, *Marshal*,
By A. C. KOOGLE,
Deputy Marshal.

(Endorsed:) Gen. No. 1102. Circuit court of the United States for the district of Colorado. David R. Fraser *et. al*, plaintiffs, *versus* The N. Y. & Colo. Mining Syndicate and Company, defendant. Summons. Filed this 27th day of Jan'y, A. D. 1883. (S'g'd) Edward F. Bishop, clerk, by Wm. E. Rogers, deputy clerk. Amos Steck, of Denver, attorney for plaintiffs.

And afterwards and on, to wit, the 23rd day of April, A. D. 1883, the same being in vacation preceding the May term, A. D. 1883, of said court, at chambers, before the Honorable Moses Hallett, district judge, the following proceeding was had and entered of record in said court and in said cause, to wit:

Order Consolidating.

7 DAVID R. FRASER and THOMAS CHALMERS, Copartners, Trading and Doing Business under the Firm Name and Style of Fraser and Chalmers,
vs.
THE NEW YORK AND COLORADO MINING SYNDICATE & COMPANY. } 1102.

On promissory note and an account.

These causes coming on to be heard upon motion of defendant that the said five several suits heretofore pending in this court, in which said David H. Fraser and Thomas Chalmers, partners, &c., as Fraser & Chalmers, are plaintiffs and the said The New York & Colorado Mining Syndicate and Company are defendants, be consolidated into one action, and after hearing Amos Steck, Esqr., attorney for plaintiffs, and Wolcott & Milburn, attorneys for defendant, and the court being fully advised in the premises, it is ordered that said actions be consolidated into one action, to be known as No. 1102; and the said attorney for said plaintiffs bringing now before the judge of said court his consolidated complaint in said cause and filing the same, it is ordered that defendant plead to said complaint within twenty days from this date.

And be it further remembered that afterwards and on, to wit, the 22nd day of January, A. D. 1883, came again the said plaintiffs, by their attorney aforesaid, and filed in said court their complaint and sued out of and under the seal of said court a writ of summons against the said defendant, and the said complaint is in words and figures as follows, to wit:

7½ *Complaint.*

UNITED STATES OF AMERICA, *District of Colorado,* } *ss:*

In the Circuit Court of the United States for said District.

DAVID R. FRASER and THOMAS CHALMERS, Copartners, Trading and Doing Business under the Firm Name & Style of Fraser & Chalmers, Plaintiffs,

vs.

THE NEW YORK AND COLORADO MINING SYNDICATE AND COMPANY, Defendant.

The plaintiff, David R. Fraser, and Thomas Chalmers also, who are citizens of the State of Illinois, copartners, trading and doing business under the firm name and style of Fraser & Chalmers, sue

the New York and Colorado Mining Syndicate and Company, citizen of the State of Colorado, incorporated by the name aforesaid by the said State, and having its principal place of business therein, defendant, and for cause of action against the said defendant say:

I. That on the 2d day of December, A. D. 1882, at New York, the said defendant made its certain promissory note bearing date
8 the day and year last aforesaid, and then & there delivered said note to the said plaintiffs, by which promissory note the said defendant, The New York and Colorado Mining Syndicate and Company, promised to pay, forty-five days after the date thereof, to the order of the said plaintiffs, Fraser and Chalmers, for value received, the sum of fifteen hundred dollars; and the plaintiffs allege that by means thereof the said defendant then and there became liable to pay to the said plaintiffs the said sum of money in the said promissory note specified, according to the tenor and effect of said promissory note; and the plaintiffs further allege that the time when said promissory note was payable has long since elapsed, yet the said defendant has not as yet paid the said sum of money in said promissory note specified or any part thereof, but to pay the same both refused and still doth neglect and refuse to pay the same or any part thereof to the said plaintiffs; wherefore the plaintiffs demand judgment against the said defendant, to wit:

II. For the sum of fifteen hundred dollars, with interest thereon from the 19th day of January, A. D. 1883, and costs of protest and of this action.

(S'g'd) AMOS STECK,
Attorney for Plaintiffs Fraser & Chalmers.

(Endorsed:) 1112. Fraser & Chalmers, pl'ffs, *vs.* The New York and Colorado Mining Syndicate and Company, d'f't. Complaint. Filed Jan. 22, 1883. (S'g'd) Edward F. Bishop, clerk. Amos Steck, att'y for pl'ffs.

9 And the said summons is in words and figures as follows, to wit:

Summons.

UNITED STATES OF AMERICA, } ss:
District of Colorado, }

In the Circuit Court of the United States for the District of Colorado.

DAVID R. FRASER and THOMAS CHALMERS, Copartners, Trading and Doing Business under the Firm Name and Style of Fraser & Chalmers, Plaintiffs,

versus

THE NEW YORK AND COLORADO MINING SYNDICATE AND COMPANY, Defendant.

Complaint. Filed in the clerk's office this 22d day of January, A. D. 1883.

The President of the United States of America to the above-named defendant, Greeting:

You are hereby notified that an action has been brought in said

court by the above-named plaintiffs against you, as defendant, to recover the sum of $1,500 due from you, the said defendant, to the said plaintiffs upon a certain promissory note, dated at New York, N. Y., December 2d, 1882, and signed by you, the said defendant, for the sum of $1,500.00, together with interest on said sum from the 19th day of January, A. D. 1883, and costs of protest and of this action, as more fully set forth in the complaint filed herein and to which reference is here made.

You are hereby required to appear and demur or answer to the complaint filed in said action in said court within ten days (exclusive of the day of service) after this summons shall be served on you, if such service shall be made within the county of Arapahoe; otherwise within forty days from the day of service; and if you fail so to do the said plaintiffs will take judgment against you by default, according to the prayer of the said complaint, for said sum of $1,500.00, interest as aforesaid, and costs.

Witness the Honorable Morrison R. Waite, Chief Justice of the Supreme Court of the United States, and the seal of the said circuit court, at the city of Denver, in said district, this 22d day of January, A. D. 1883, and of the Independence of the United States the 107th year.

[Seal U. S. Cir. C't, Colorado.]

(S'g'd) EDWARD F. BISHOP, *Clerk*,
By WM. E. ROGERS,
Deputy Clerk.

Proof of Service.

UNITED STATES OF AMERICA, *District of Colorado*, } *ss:*

DENVER, *Jan. 27th, A. D.* 1883.

I hereby certify that I received the within writ on the 27th day of January, A. D. 1883, and that I have personally served the same upon the said defendant, The New York and Colorado Syndicate and Mining Company, by delivering to George K. Sabin, their superintendent, personally a true copy of the within writ at the day and time as follows: At Denver, county of Arapahoe, on the 27th day of January, A. D. 1883. This writ therefore returned executed as the law directs this 27th day of January, A. D. 1883.

(S'g'd) WALTER A. SMITH, *Marshal*,
By A. C. KOOGLE,
Deputy Marshal.

(Endorsed:) Gen. No. 1112. Circuit court of the United States for the district of Colorado. David R. Fraser *et al.*, plaintiffs, *versus* The New York and Colo. Mining Syndicate and Co., defendant. Summons. Filed this 27th day of Jan'y, A. D. 1883. (S'g'd) Edward F. Bishop, clerk, by Wm. E. Rogers, deputy clerk. Amos Steck, of Denver, attorney for plaintiffs.

And afterwards and on, to wit, the 23d day of April, A. D. 1883, the same being in vacation preceding the May term, A. D. 1883, of said court, at chambers, before the Honorable Moses Hallett, district judge, the following proceeding was had and entered of record in said court and in said cause, to wit:

Order Consolidating.

DAVID R. FRASER and THOMAS CHALMERS, Copartners, Trading and Doing Business under the Firm Name and Style of Fraser and Chalmers,
vs.
THE NEW YORK AND COLORADO MINING SYNDICATE AND COMPANY. } 1112.

On promissory notes.

12 These causes coming on to be heard upon motion of defendant that the said five several suits heretofore pending in this court in which said David H. Fraser and Thomas Chalmers, partners, &c., as Fraser and Chalmers, are plaintiffs and the said The New York & Colorado Mining Syndicate and Company are defendants, be consolidated into one action, and, after hearing Amos Steck, Esqr., attorney for plaintiffs, and Wolcott & Milburn, attorneys for defendant, and the court being fully advised in the premises, it is ordered that said actions be consolidated into one action, to be known as No. 1102; and the said attorney for said plaintiffs bringing now before the judge of said court his consolidated complaint in said cause and filing the same, it is ordered that defendant plead to said complaint within twenty days from this date.

And be it further remembered that afterwards and on, to wit, the 12th day of February, A. D. 1883, came again the said plaintiffs, by their attorney aforesaid, and filed in said court their complaint and sued out of and under the seal of said court a writ of summons against the said defendant, and the said complaint is in words and figures as follows, to wit:

Complaint.

UNITED STATES OF AMERICA, *District of Colorado,* } *ss:*

12½ In the District Court of the United States for the District of Colorado.

DAVID R. FRASER and THOMAS CHALMERS, Copartners, Trading and Doing Business under the Firm Name and Style of Fraser & Chalmers, Plaintiffs,

vs.

THE NEW YORK AND COLORADO MINING SYNDICATE AND COMPANY, Defendant.

The plaintiffs, David R. Fraser and Thomas Chalmers, copartners, trading and doing business under the firm name and style of Fraser & Chalmers, who are citizens of the State of Illinois, sue The New

York and Colorado Mining Syndicate and Company, citizen of the State of Colorado, incorporated by the name aforesaid by the State of Colorado, and having its principal place of business therein, defendant, and for cause of action alleges as follows, to wit:

I. That on the 2d day of December, A. D. 1882, the said defendant, The New York and Colorado Mining Syndicate and Company, at New York, made its promissory note and delivered the same to the plaintiffs, and then and there promised to pay to the plaintiffs, sixty days after date thereof, the sum of two thousand dollars, for value received, at its office, in the city of New York, by means whereof the defendant then and there became liable to pay to the said plaintiffs the said sum of money in the said promissory note specified, according to the tenor and effect thereof; and, being so
13 liable, the defendant, in consideration thereof, then and there promised the plaintiffs to pay the said sum of money according to the tenor and effect of the said note; yet, although the day of payment in the said note specified has long since elapsed, and the said note was duly presented for payment at its maturity at the office of the defendant, in New York, and the same was not paid, nor any part thereof, & thereupon the said note was duly protested for non-payment, but the defendant hath refused and still refuses to pay the same or any part thereof; wherefore the plaintiffs demand judgment against the said defendant.

II. For the sum of two thousand dollars and interest from the 3d day of February, 1883, for costs of protest, and for costs of suit.

(S'g'd) AMOS STECK,
Att'y for Plaintiffs, David R. Fraser & Thomas Chalmers.

(Endorsed:) No. 1127. Circuit court U. S. David R. Fraser and Thomas Chalmers, pl'ffs, *vs.* The New York and Colorado Mining Syndicate & Company, d'f't. Filed Feb. 12, 1883. (S'g'd) Edward F. Bishop, clerk. Amos Steck, att'y for pl'ffs.

And the said summons is in words and figures as follows, to wit:

Summons.

14 UNITED STATES OF AMERICA, } *ss:*
District of Colorado, }

In the Circuit Court of the United States for the District of Colorado.

DAVID R. FRASER and THOMAS CHALMERS, Copartners, Trading and Doing Business under the Firm Name and Style of Fraser & Chalmers, Plaintiffs,

versus

THE NEW YORK AND COLORADO MINING SYNDICATE AND COMPANY, Defendant.

Complaint. Filed in the clerk's office this 12th day of February, A. D. 1883.

The President of the United States of America to the above-named defendant, Greeting:

You are hereby notified that an action has been brought in said

court by the above-named plaintiffs against you, as defendant, to recover the sum of $2,000.00 due from you, the said defendant, to the said plaintiff- upon a certain promissory note, dated at New York on the 2d day of December, A. D. 1882, for the sum of $2,000.00, as more fully set forth in the complaint on file herein, and to which reference is here made, together with interest on said sum from the 3rd day of February, A. D. 1883, for costs of protest and for costs of suit.

You are hereby required to appear and demur or answer to the complaint filed in said action in said court within ten days (exclusive of the day of service) after this summons shall be served on you, if such service shall be made within the county of Arapahoe; otherwise within forty days from the day of the service; and if you fail
15 so to do the said plaintiffs will take judgment against you by default, according to the prayer of the said complaint, for said sum of $2,000.00, interest and cost as aforesaid.

Witness the Honorable Morrison R. Waite, Chief Justice of the Supreme Court of the United States, and the seal of the said circuit court, at the city of Denver, in said district, this 12th day of February, A. D. 1883, and of the Independence of the United States the 107th year.

[Seal Cir. C't U. S., Colorado.]

(S'g'd) EDWARD F. BISHOP, *Clerk*,
By WM. E. ROGERS,
Deputy Clerk.

Proof of Service.

UNITED STATES OF AMERICA, } ss:
District of Colorado, }

DENVER, *Feb'y 14th, A. D.* 1883.

I hereby certify that I received the within writ on the 12th day of February, A. D. 1883, and that I have personally served the same upon the said defendants, The New York and Colorado Syndicate and Company, by delivering to George K. Sabin, general superintendent of said defendant, personally a true copy of the within writ at the day and time as follows: At Denver, county of Arapahoe, on the 13th day of February, A. D. 1883.

This writ therefore returned executed as the law directs this 13th day of February, A. D. 1883.

15½ (S'g'd) WALTER A. SMITH, *Marshal*,
By SIM. W. CANTRIL,
Deputy Marshal.

(Endorsed:) Gen. No. 1127. Circuit court of the United States for the district of Colorado. David R. Fraser *et al.*, plaintiffs, *versus* The New York and Colorado Mining Syndicate & Co., defendant. Summons. Filed this 13th day of Feb'y, A. D. 1883. (S'g'd) Edward F. Bishop, clerk, by Wm. E. Rogers, deputy clerk. Amos Steck, of Denver, attorney for plaintiffs.

And afterwards and on, to wit, the 23rd day of April, A. D. 1883, the same being in vacation preceding the May term, A. D. 1883, of said court, at chambers, before the Honorable Moses Hallett, district judge, the following proceeding was had and entered of record in said court in said cause, to wit:

Order Consolidating.

DAVID R. FRASER and THOMAS CHALMERS, Copartners, Trading and Doing Business under the Firm Name and Style of Fraser and Chalmers,
vs.
THE NEW YORK AND COLORADO MINING SYNDICATE AND COMPANY. } 1127.

On promissory note.

These causes coming on to be heard upon motion of defendant that the said five several suits heretofore pending in this court, in which said David A. Fraser and Thomas Chalmers, partners, &c., as Fraser & Chalmers, are plaintiffs and the said The New York & Colorado Mining Syndicate and Company are defendant, be consolidated into one action, and, after hearing Amos Steck, Esqr., attorney for plaintiffs, and Wolcott & Milburn, attorneys for defendant, and the court being fully advised in the premises, it is ordered that said actions be consolidated into one action, to be known as No. 1102; and the said attorney for said plaintiffs bringing now before the judge of said court his consolidated complaint in said cause and filing the same, it is ordered that defendant plead to said complaint within twenty days from this date.

16 Be it further remembered that afterwards and on, to wit, the 24th day of February, A. D. 1883, came again the said plaintiffs, by their attorney aforesaid, and filed in said court their complaint and sued out of and under the seal of said court a writ of summons against the said defendant, and the said complaint is in words and figures as follows, to wit:

Complaint.

UNITED STATES OF AMERICA, } *ss:*
District of Colorado, }

In the Circuit Court of the United States for the District *Court* of Colorado.

17 DAVID R. FRASER and THOMAS CHALMERS, Copartners, Trading and Doing Business under the Firm Name & Style of Fraser & Chalmers, Plaintiffs,

vs.

THE NEW YORK AND COLORADO MINING SYNDICATE AND COMPANY, Defendant.

The plaintiffs, David R. Fraser and Thomas Chalmers, copartners, trading and doing business under the firm name & style of Fraser and Chalmers, who are citizens of the State of Illinois, sue The New York and Colorado Mining Syndicate and Company, citizen of the

State of Colorado, incorporated by the name aforesaid by the said State and having its principal place of business therein, defendant, and for cause of action states, as follows, to wit:

I. That the said defendant, The New York and Colorado Mining Syndicate and Company, on the 2d day of December, A. D. 1882, at New York, made its promissory note in writing and delivered the same to the said plaintiffs, and thereby then and there promised to pay to the said plaintiffs, seventy-five days after the date thereof, at its office, No. 2 Wall street, in New York, the sum of fifteen hundred dollars for value received; by means whereof the defendant then and there became liable to the said plaintiffs to pay them the said sum of money in the said promissory note specified according to the tenor and effect thereof; and, being so liable, the defendant, in consideration thereof, then and there promised the plaintiffs to pay the said sum of money according to the tenor & effect of said note; and the plaintiffs allege that on, to wit, the 18th day of February,

18 A. D. 1883, the said promissory note was presented at the office of the said defendant, in New York, for payment, and the same was then & there refused payment, whereupon the said promissory note was then & there protested for non-payment; yet, although the day of payment in the said note specified has long since elapsed, the defendant has not paid to the plaintiffs the said sum of money or any part thereof, but refuses so to do; wherefore—

II. The said plaintiffs demand judgment against the said defendant for the sum of fifteen hundred dollars and interest since the 18th day of February, A. D. 1883, and fees of protest and costs of suit.

(S'g'd) AMOS STECK,
Att'y for Plaintiffs Fraser & Chalmers.

(Endorsed:) No. 1133. Circuit court U. S. David R. Fraser and Thomas Chalmers, pl'ffs, *vs.* The New York and Colorado Mining Syndicate and Company, d'f't. Filed Feb. 24, 1883. (S'g'd) Edward F. Bishop, clerk. Amos Steck, att'y for pl'ffs.

And the said summons is in words and figures as follows, to wit:

Summons.

UNITED STATES OF AMERICA, } ss:
District of Colorado. }

In the Circuit Court of the United States for the District of Colorado.

19 DAVID R. FRASER and THOMAS CHALMERS, Copartners, Trading and Doing Business under the Firm Name & Style of Fraser & Chalmers, Plaintiffs,

versus

THE NEW YORK AND COLORADO MINING SYNDICATE AND COMPANY, Defendant.

Complaint. Filed in the clerk's office this 24th day of February, A. D. 1883.

The President of the United States of America to the above-named defendant, Greeting:

You are hereby notified that an action has been brought in said

court by the above-named plaintiffs against you, as defendant, to recover the sum of $1,500 due from you, the said defendant, to the said plaintiffs upon a certain promissory note, dated at New York, in the State of New York, December 2d, 1882, and signed by you, the said defendant, for said sum of $1,500.00, together with interest on said sum from the 18th day of February, A. D. 1883, and for the costs of this suit, as more fully set forth in the complaint filed herein and to which reference is here made.

You are hereby required to appear and demur or answer to the complaint filed in said action in said court within ten days (exclusive of the day of service) after this summons shall be served on you, if such service shall be made within the county of Arapahoe; otherwise within forty days from the day of service; and if you fail so to do the said plaintiffs will take judgment against you by default, according to the prayer of the said complaint, for said sum of 1,500.00, interest as aforesaid, and costs.

Witness the Honorable Morrison R. Waite, Chief Justice of the Supreme Court of the United States, and the seal of the said circuit court, at the city of Denver, in said district, this 24th day of February, A. D. 1883, and of the Independence of the United States the 107th year.

[Seal Cir. C't U. S., Colorado.]

(S'g'd) EDWARD F. BISHOP, *Clerk*,
[SEAL.] By WM. E. ROGERS,
Deputy Clerk.

A true copy.
Teste: EDWARD F. BISHOP, *Clerk*,
By WM. E. ROGERS, *Deputy.*

Proof of Service.

UNITED STATES OF AMERICA, *District of Colorado*, } ss:

DENVER, *March* 5, 1883.

The defendant accepts service of the within summons this day, March 5, 1883.

(S'g'd) THE NEW YORK & COLORADO MINING SYNDICATE & COMPANY,
By HORACE A. HURLBUT,
Managing Director.

(Endorsed:) Copy. Gen. No. 1133. Circuit court of the United States for the district of Colorado. David R. Fraser *et al.*, plaintiffs, *versus* The N. Y. & Colo. Min'g Syndicate and Company, defendant. Service accepted 5 March, 1883, by Hurlbut, managing director. Summons. Filed this 15th day of March, A. D. 1883. (S'g'd) Edward F. Bishop, clerk, by Wm. E. Rogers, deputy clerk. Amos Steck, of Denver, attorney for plaintiffs.

And afterwards and on, to wit, the 23rd day of April, A. D. 1883, the same being in vacation preceding the May term, A. D. 1883, of said court, at chambers, before the Honorable Moses Hallett, district judge, the following proceeding was had and entered of record in said court and in said cause, to wit:

Order Consolidating.

DAVID R. FRASER and THOMAS CHALMERS, Copartners, Trading and Doing Business under the Firm Name and Style of Fraser and Chalmers,
vs.
THE NEW YORK AND COLORADO MINING SYNDICATE AND COMPANY. } 1133.

On promissory note.

These causes coming on to be heard upon motion of defendant that the said five several suits heretofore pending in this court, in which said David H. Fraser and Thomas Chalmers, partners, &c., as Fraser & Chalmers, are plaintiffs and the said The New York & Colorado Mining Syndicate and Company are defendant, be consolidated into one action, and, after hearing Amos Steck, Esq'r., attorney for plaintiffs, and Wolcott & Milburn, attorneys for defendant, and the court being fully advised in the premises, it is ordered that said actions be consolidated into one action, to be known as No. 1102; and the said attorney for said plaintiffs bringing now before the judge of said court his consolidated complaint in said cause and filing the same, it is ordered that defendant plead to said complaint within twenty days from this date.

21 Be it further remembered that afterwards and on, to wit, the 15th day of March, A. D. 1883, came again the said plaintiffs, by their attorney aforesaid, and filed in said court their complaint and sued out of and under the seal of said court a writ of summons against the said defendant, and the said complaint is in words and figures as follows, to wit:

Complaint.

UNITED STATES OF AMERICA, } ss:
District of Colorado, }

In the Circuit Court of the United States for the District of Colorado.

DAVID R. FRASER and THOMAS CHALMERS, Copartners, Trading and Doing Business under the Firm Name and Style of Fraser & Chalmers, Plaintiffs,
vs.
22 THE NEW YORK AND COLORADO MINING SYNDICATE AND COMPANY, Defendant.

The plaintiffs, David R. Fraser and Thomas Chalmers, copartners, trading and doing business under the firm name and style of Fraser

& Chalmers, who are citizens of the State of Illinois, sue The New York and Colorado Mining Syndicate and Company, citizen of the State of Colorado, incorporated by the name aforesaid by the said State and having its principal place of business therein, defendant, and for cause of action against the said defendant state as follows, to wit:

I. For that whereas the defendant, on the 2d day of December, A. D. 1882, at New York, made its promissory note and delivered the same to the plaintiff, and thereby then and there promised to pay, ninety days after the date thereof, to the order of the plaintiffs, at the office of *office of* said defendant company, No. 2 Wall street, in New York, for value received, the sum of four thousand dollars, by means whereof the said defendant then and there became liable to pay to the plaintiffs the amount of the said promissory note according to the tenor and effect thereof; and, being so liable, the defendant, in consideration thereof, then and there promised the plaintiffs to pay them the said amount according to the tenor and effect of the said note; yet, although the day of payment in the said note specified has elapsed, the defendant has not paid to the plaintiffs the said sum of money or any part thereof, but refuses so to do; wherefore—

II. The plaintiffs demand judgment against the said defendant in the sum of four thousand dollars, together with interest thereon from the fifth day of March, A. D. 1883, and their costs
23 of suit.

(S'g'd) AMOS STECK,
Attorney for Plaintiffs Fraser & Chalmers.

(Endorsed:) 1146. Circuit court U. S. David R. Fraser and Thomas Chalmers, copartners, &c., pl'ffs, *vs.* The New York and Colorado Mining Syndicate & Company, def'ts. Complaint. Filed Mar. 15, 1883. (S'g'd) Edward F. Bishop, clerk. Amos Steck, att'y for pl'ffs.

And the said summons is in words and figures as follows, to wit:

Summons.

UNITED STATES OF AMERICA, } ss:
District of Colorado, }

In the Circuit Court of the United States for the District of Colorado.

DAVID R. FRASER and THOMAS CHALMERS, Copartners, Trading and Doing Business under the Firm Name & Style of Fraser & Chalmers, Plaintiffs,

versus

THE NEW YORK AND COLORADO MINING SYNDICATE AND COMPANY, Defendant.

Complaint. Filed in the clerk's office this 15th day of March, A. D. 1883.

24 The President of the United States of America to the above-named defendant, Greeting:

You and each of you are hereby notified that an action has been

brought in said court by the above-named plaintiffs against you as defendant to recover the sum of $4,000.00, due from you, the said defendant, to the said plaintiffs on a certain promissory note dated at New York, December 2nd, 1882, and signed by you, the said defendant, for said sum of $4,000.00, together with interest on said sum from the 5th day of March, 1883, and for the costs of this suit, as more fully set forth in the complaint filed herein and to which reference is here made. You are hereby required to appear and demur or answer to the complaint filed in said action in said court within ten days (exclusive of the day of service) after this summons shall be served on you, if such service shall be made within the county of Arapahoe; otherwise within forty days from the day of service; and if you fail so to do the said plaintiffs will take judgment against you by default, according to the prayer of said complaint, for the said sum of $4,000.00, interest as aforesaid, and costs.

Witness the Honorable Morrison R. Waite, Chief Justice of the Supreme Court of the United States, and the seal of the said circuit court, at the city of Denver, in said district, this 15th day of March, A. D. 1883, and of the Independence of the United States the 107th year.

[Seal Cir. C't U. S., Colorado.]

(S'g'd) EDWARD F. BISHOP, *Clerk*,
By WM. E. ROGERS,
Deputy Clerk.

25 *Proof of Service.*

UNITED STATES OF AMERICA, *District of Colorado*, } *ss:*

The New York and Colorado Mining Syndicate and Company accept service of the within summons.

(S'g'd) GEO. K. SABIN, *Sup't.*

Denver, Arapahoe county, March 22, '83.

(Endorsed:) Gen. No. 1146. Circuit court of the United States for the district of Colorado. David R. Fraser *et al.*, plaintiffs, *versus* The New York and Colo. M'g Syndicate & Co., defendant. Summons. Filed this 16 day of April, A. D. 1883. (S'g'd) Edward F. Bishop, clerk, by Wm. E. Rogers, deputy clerk. Amos Steck, of Denver, attorney for plaintiffs.

And afterwards and on, to wit, the 23rd day of April, A. D. 1883, the same being in vacation preceding the May term, A. D. 1883, of said court, at chambers, before the Honorable Moses Hallett, district judge, the following proceeding was had and entered of record in said court and in said cause, to wit:

26 *Order Consolidating.*

DAVID R. FRASER and THOMAS CHALMERS, Copartners, Trading and Doing Business under the Firm Name and Style of Fraser and Chalmers,
vs.
THE NEW YORK AND COLORADO MINING SYNDICATE AND COMPANY. } 1146.

On promissory note.

These causes coming on to be heard upon motion of defendant that the said five several suits heretofore pending in this court, in which David R. Fraser and Thomas Chalmers, partners, &c., as Fraser & Chalmers, are plaintiffs and the said The New York & Colorado Mining Syndicate & Company are defendant, be consolidated into one action, and, after hearing Amos Steck, Esqr., attorney for plaintiffs, and Wolcott & Milburn, attorneys for defendant, and the court being fully advised in the premises, it is ordered that said actions be consolidated into one action, to be known as No. 1102; and the said attorney for said plaintiffs bringing now before the judge of said court his consolidated complaint in said cause and filing the same, it is ordered that defendant plead to said complaint within twenty days from this date.

And afterwards and on the same day, to wit, the 23rd day of April, A. D. 1883, came again the said plaintiffs, by Amos Steck, Esq., their attorney, and filed in said court and in said cause their consolidated complaint, and the said consolidated complaint is in words and figures as follows, to wit:

27 *Consolidated Complaint.*

UNITED STATES OF AMERICA, *District of Colorado,* } *ss:*

In the Circuit Court of the United States for the District of Colorado.

DAVID R. FRASER and THOMAS CHALMERS, Copartners, Trading and Doing Business under the Firm Name and Style of Fraser & Chalmers, Plaintiffs,
vs.
THE NEW YORK AND COLORADO MINING SYNDICATE AND COMPANY, Defendant.

David R. Fraser and Thomas Chalmers, copartners, trading and doing business under the firm name and Style of Fraser & Chalmers, plaintiffs, who are citizens of the State of Illinois, sue The New York and Colorado Mining Syndicate and Company, citizen of the State of Colorado, incorporated by the name aforesaid by the said State and having its principal place of business therein, defendant, and for cause of action states as follows, to wit:

1. For that whereas the defendant, on the 2nd day of December, A. D. 1882, at New York, made its certain promissory note and delivered the same to the said plaintiffs, and thereby then and
28 there promised to pay to the order of the said plaintiffs, thirty days after the date thereof, the sum of one thousand dollars, at the office of said defendant, No. 2 Wall street, New York, for value received, by means whereof the defendant then and there became liable to pay to the order of the said plaintiffs the said sum of money in the said promissory note specified according to the tenor and effect thereof; and, being so liable, the defendant, in consideration thereof, then and there promised the plaintiffs to pay them the said sum of money according to the tenor and effect of the said promissory note.

And the plaintiffs allege that the said plaintiffs, on the day of the maturity of said promissory note, presented the said promissory note at the office of the said defendant, No. 2 Wall street, New York, for payment, duly endorsed by the said plaintiffs, and payment thereof was then and there refused by the said defendant.

Whereupon the said promissory note was duly protested for non-payment.

And the plaintiffs further say that, although the day of payment in said promissory note specified has long elapsed, the defendant has not paid to the plaintiffs the said sum of money or any part thereof or the costs of protest thereof, amounting to the sum of one dollar and twenty-five cents ($1.25), but refuses so to do.

2. And for a second and different and other cause of action against the said defendant the plaintiffs allege that the said defendant, on the 2nd day of December, A. D. 1882, at New York, made its certain other promissory note and delivered the same to
29 the said plaintiffs, and thereby then and there promised to pay to the order of the said plaintiffs, forty-five days after the date thereof, the sum of fifteen hundred dollars at the office of said defendant, No. 2 Wall street, New York, for value received, by means whereof the defendant then and there became liable to pay to the order of the said plaintiffs the said sum of money in the said promissory note specified, according to the tenor and effect thereof; and, being so liable the defendant, in consideration thereof, then and there promised the plaintiffs to pay them the said sum of money according to the tenor and effect of the said promissory note.

And the plaintiffs allege that the said plaintiffs, on the day of the maturity of the said promissory note, presented the said promissory note at the office of the said defendant, No. 2 Wall street, New York, for payment, duly endorsed by the said plaintiffs, and payment thereof was then and there by the said defendant refused, whereupon the said promissory note was duly protested for non-payment; and the plaintiffs further say that, although the day of payment in said promissory note specified has long elapsed, the defendant has not paid to the plaintiffs the said sum of money or any part thereof or the costs of the protest thereof, amounting to the sum of one dollar and thirty-cents ($1.30), but refuses so to do.

3. And for a third and different and other cause of action against

the said defendant the plaintiffs allege that the said defendant, on the second day of December, A. D. 1882, at New York, made
30 its certain other promissory note and delivered the same to the said plaintiffs, and thereby then and there promised to pay to the order of the said plaintiffs, sixty days after the date thereof, the sum of two thousand dollars ($2,000), at the office of said defendant, No. 2 Wall street, New York, for value received, by means whereof the defendant then and there became liable to pay to the order of the said plaintiffs the said sum of money in the said promissory note specified, according to the tenor and effect thereof; and, being so liable, the defendant, in consideration thereof, then and there promised the plaintiffs to pay them the said sum of money according to the tenor and effect of the said promissory note.

And the plaintiffs allege that the said plaintiffs, on the day when the said promissory note became due and payable, presented the said promissory note at the office of the said defendant, No. 2 Wall street, New York, for payment, duly endorsed by the said plaintiffs, and payment thereof was then and there by the said defendant refused, whereupon the said promissory note was duly protested for non-payment.

And the plaintiffs further state that, although the day of payment in said promissory note specified has long elapsed, the defendant has not paid to the plaintiffs the said sum of money or any part thereof or the costs of protest thereof, amounting to the sum of one dollar and thirty-three cents ($1.33), but refuses so to do.

4. And for a further and different and other cause of action against the said defendant the plaintiffs allege that the said
31 defendant, on the 2nd day of December, A. D. 1882, at New York, made its certain other promissory note and delivered the same to the said plaintiffs, and thereby then and there promised to pay to the order of the said plaintiffs, seventy-five days after the date thereof, the sum of fifteen hundred dollars ($1,500), at the office of the said defendant, No. 2 Wall street, New York, for value received, by means whereof the defendant then and there became liable to pay to the order of the said plaintiffs the said sum of money in the said promissory note specified, according to the tenor and effect thereof; and, being so liable, the defendant, in consideration thereof, then and there promised the plaintiffs to pay them the said sum of money according to the tenor and effect of the said promissory note; and the plaintiffs allege that the said plaintiffs, on the day when the said promissory note became due and payable, presented the said promissory note at the office of the said defendant, No. 2 Wall street, New York, for payment, duly endorsed by the said plaintiffs, and payment thereof was then and there by the said defendant refused, whereupon the said promissory note was duly protested for non-payment; and the plaintiffs further state that, although the day of payment in said promissory note specified has long elapsed, the defendant has not paid to the plaintiffs the said sum of money or any part thereof or the costs of protest thereof, amounting to the sum of one dollar and thirty-three cents ($1.33), but refuses so to do.

5. And for a fifth, separate, and other cause of action against the said defendant the plaintiffs allege that the said defendant,
32 on the 2nd day of December, A. D. 1882, at New York, made a certain other promissory note and delivered the same to the said plaintiffs, and thereby then and there promised to pay to the order of the said plaintiffs, ninety days after the date thereof, the sum of four thousand dollars ($4,000), at the office of the said defendant, No. 2 Wall street, New York, for value received, by means whereof the said defendant then and there became liable to pay to the order of the said plaintiffs the said sum of money in the said promissory note specified according to the tenor and effect thereof; and, being so liable, the said defendant, in consideration thereof, then and there promised the plaintiffs to pay them the said sum of money according to the tenor and effect of the said promissory note; and the plaintiffs further state that the said plaintiffs, on the day when the said promissory note became due and payable, presented the said promissory note at the office of the said defendant, No. 2 Wall street, New York, for payment, duly endorsed by the said plaintiffs, and payment thereof was then and there by the said defendant refused, whereupon the said promissory note was duly protested for non-payment; and the plaintiffs further state that, although the day of payment in said promissory note specified has long elapsed, the defendant has not paid to the plaintiffs the said sum of money or any part thereof or the costs of protest thereof, amounting to the sum of one dollar and thirty cents ($1.30), but refuses so to do.

6. And for a further, separate, and other cause of action
33 against the said defendant the plaintiffs state that heretofore, to wit, at Chicago, in the State of Illinois, on or about the 25th day of July, and at divers days and times thereafter, up to about the first day of January, A. D. 1883, the said plaintiffs, at the request of the said defendant, sold and delivered to the said defendant divers goods, chattels, and effects of great value, to wit, of the value of two thousand five hundred and thirty-one dollars and seventy-eight cents ($2,531.78); in consideration whereof the said defendant promised the said plaintiffs to pay them on request so much money as the said goods, chattels, and effects at the times of the sale and delivery thereof aforesaid were reasonably worth, and the plaintiffs aver that the same were reasonably worth the said sum of two thousand five hundred and thirty-one dollars and seventy-eight cents ($2,531.78); yet the said defendant, though requested, has not paid the plaintiffs the last-mentioned sum of money or any part thereof, but refuses so to do; wherefore the plaintiffs demand judgment against the said defendant as follows, to wit:

7. That the plaintiffs have and recover from the said defendant the sum of twelve thousand five hundred and thirty-eight dollars and twenty-nine cents ($12,538.29), with interest thereon as follows, to wit: Interest upon one thousand and one dollars and twenty-five cents ($1,001.25) from and after the fourth day of January, A. D. 1883; interest upon fifteen hundred and one dollars and thirty cents ($1,501.30) from and after the 19th day of January, A. D. 1883; interest upon two thousand and one dollars and thirty-three cents

34 ($2,001.33) from and after the 3rd day of February, A. D. 1883; interest upon fifteen hundred and one dollars and thirty-three cents ($1,501.33) from and after the 17th day of February, A. D. 1883; interest upon four thousand and one dollars and thirty cents ($4,001.30) from and after the 5th day of March, A. D. 1883, and interest upon the sum of twenty-five hundred and thirty-one dollars and seventy-eight cents ($2,531.78) from and after the 1st day of January, A. D. 1883, and for their costs of suit.

AMOS STECK,
Attorney for the Plaintiffs, David R. Fraser and Thomas Chalmers.

(Endorsed:) No. 1102. David R. Fraser and Thomas Chalmers, copartners, &c., pl'ffs, *vs.* The New York and Colorado Mining Syndicate and Company, def't. Consolidated complaint. Filed Apr. 23, 1883. (S'g'd) Edward F. Bishop, clerk. Amos Steck, att'y for pl'ffs.

35 And afterwards and on, to wit, the 25th day of August, A. D. 1883, came again the said defendant, by Edward O. Wolcott, its attorney, and filed in said court and in said cause its answer to the consolidated complaint heretofore filed herein; and the said answer is in words and figures as follows, to wit:

Answer to Consolidated Complaint.

UNITED STATES OF AMERICA, *District of Colorado,* } *ss:*

In the Circuit Court of the United States for the District of Colorado.

DAVID R. FRASER and THOMAS CHALMERS, Copartners, Trading and Doing Business under the Firm Name and Style of Fraser & Chalmers, Plaintiffs,

vs.

THE NEW YORK AND COLORADO MINING SYNDICATE AND COMPANY, Defendant.

The answer of the defendant herein to the consolidated complaint of the plaintiffs.

1. For a first defence to the first five causes of action set forth in said complaint the defendant avers that at the city of Chicago, State of Illinois, in or about the month of November, in the year A. D. 1881, the plaintiffs entered into an agreement with the de-
36 fendant in this action whereby said plaintiffs agreed to manufacture for and sell and deliver to the defendant herein, for and at a price therein agreed upon, a certain roasting cylinder and the necessary apparatus connected therewith, and to erect and put the same in its place at the mine hereinafter mentioned; which cylinder and apparatus are particularly described as follows:

1 roasting cylinder, 52″ diam., about 27 ft. long, made in sections from cast iron, all complete, with driving trucks and gear; all bolts

for joining sections, together with necessary nuts for same; all binders for brick-work.

1 dry floor, 10 ft. x 30 ft. x ¼", joined with straps riveted on one piece so as to make floor flush on top, the other piece to be riveted to strap at mill.

1 set of grate bars ½" long.

1 fire front, complete, with doors and bearing bars.

1 ore car, regular style.

1 conveyor, complete, with gear, to be about 20 ft. long x 10" diam.

1 elevator, complete, with buckets, belt, shafting, pulleys, etc.

1 salt-feeder.

1 salt-grinder.

All shafting, pulleys, and belting necessary for driving the above-described machinery.

The defendant further avers that it was agreed between the said defendant and the plaintiffs at the time said cylinder and connected apparatus were so purchased that if the same were erected and put in their place by and under the direction of one Angus McKay,
37 selected for that purpose by the plaintiffs, the said plaintiffs would warrant that said cylinder when erected would work and subserve the purposes for which it was purchased by the defendant in a satisfactory manner; that said cylinder and apparatus were so purchased by the defendant, to the knowledge of the plaintiffs, to be run and operated in connection with a mill then in operation at the mine owned by the defendant, in the county of ——, State of Colorado, known as the —— mine.

The defendant further avers that prior to the completion and delivery of said cylinder the said mill with which it was to be worked and operated was burnt down, and that in the month of March or April, 1882, the plaintiffs entered into an agreement with the said defendant whereby said plaintiffs agreed to manufacture for and sell and deliver to the defendant herein a twenty-stamp dry-crushing silver mill and its connected apparatus.

That said dry-crushing silver mill and its said apparatus were so purchased by the defendant, to the knowledge of the plaintiffs, to be used, worked, and operated in connection with the cylinder hereinbefore mentioned, and at the time of said sale the said plaintiffs warranted and agreed that said twenty-stamp dry-crushing silver mill so sold and to be supplied by them to the defendant, together with the roasting cylinder and its apparatus hereinbefore mentioned, should be of such a character and quality in all their parts as to have the capacity of doing the work of a twenty-stamp dry-crushing mill efficiently and satisfactorily; and at the same time the said plaintiffs further warranted and agreed that if the said dry-crushing mill and said cylinder and its apparatus were erected and put
38 in place under the directions of one Angus McKay, selected for that purpose by the plaintiffs, they would erect and put the same in their proper places, and would warrant and agree that the same, when erected and put in their proper places, would work properly and satisfactorily, and in all ways subserve the *purchases*

for which they were purchased by the defendant in an efficient and satisfactory manner.

The defendant further avers that said mill, cylinder, and apparatus were delivered by plaintiffs at the said mine of the defendant, in the State of Colorado aforesaid, and were erected and put into place by the plaintiffs and by and under the direction of said Angus McKay, selected for that purpose by the plaintiffs.

The defendant further avers that on the receipt and delivery of said mill, cylinder, and apparatus, but before their erection and operation, said defendant paid for said mill and all its connected apparatus, partly by cash and partly by certain promissory notes, of which the promissory notes set forth in the first, second, third, fourth, and fifth causes of action of the consolidated complaint herein are renewals; that previous to that time the purchase price of said cylinder and its apparatus had been fully paid and discharged.

The defendant further avers that said mill, cylinder, and apparatus, when erected and put into their places, were defective in many particulars and wholly unfit for the purposes for which they were purchased; all of which was in violation of the aforesaid agreements and warranties of said plaintiffs made at the time of the purchase of said mill and cylinder as hereinbefore set forth.

39 The defendant further avers that the conveyor supplied in connection with said cylinder was a five-inch conveyor instead of a ten-inch conveyor; that said cylinder was improperly erected and set in its place, and that thereby it failed to work and be of the use and service to the defendant that it would have been if constructed and erected in accordance with the agreements hereinbefore mentioned of said plaintiffs.

That the salt-feeder, which was part of the apparatus connected with said mill, was entirely useless and worthless and unfit for the purposes for which it was bought.

That the fire-brick furnished for lining a certain part of the machinery of said mill, and being part of the apparatus connected therewith, were entirely worthless and could not be used for the purpose for which they were furnished and for which they were necessary.

That the wire-work of the tramway, which was also a part of said apparatus, was insufficient, defective in quality, and unfit for the purposes for which it was furnished.

That the automatic feeder at the head of such tramway, being also part of the said apparatus, was defective, insufficient, and unfit for the purposes for which it was furnished.

The defendant further avers that by reason of the premises said plaintiffs failed to keep and perform their said agreements and warranties respecting the said cylinder, mill, and the apparatus connected with the same, and that therefore the consideration for said notes set forth in the first, second, third, fourth, and fifth clauses of action contained in the consolidated complaint failed.

40 2. For a second defense, and by way of counter-claim to all the causes of action set forth in the said complaint, the defendant avers that at the city of Chicago, State of Illinois, in or

about the month of November, in the year, A. D. 1881, the plaintiffs entered into an agreement with the defendant in this action whereby said plaintiffs agreed to manufacture for and sell and deliver to the defendant herein, for and at a price therein agreed upon, a certain roasting cylinder and the necessary apparatus connected therewith, and to erect and put the same in its place at the mine hereinafter mentioned; which cylinder and apparatus are particularly described as follows:

1 roasting cylinder, 52″ diam., about 27 ft. long, made in sections from cast iron, all complete, with driving trucks and gear; all bolts for joining sections, together with necessary nuts for same; all binders for brick-work.

1 dry floor, 10 ft. x 30 ft. x ¼″, jointed with straps riveted on one piece so as to make floor flush on top, the other piece to be riveted to strap at mill.

1 set of grate bars ½″ long.

1 fire front, complete, with doors and bearing bars.

1 ore car, regular style.

1 conveyor, complete, with gear, to be about 20 ft. long x 10″ diam.

1 elevator, complete, with buckets, belt, shafting, pulleys, etc.

1 salt-feeder.

41 1 salt-grinder.

All shafting, pulleys, and belting necessary for driving the above-described machinery.

The defendant further avers that it was agreed between the said defendant and the plaintiffs at the time said cylinder and connected apparatus were so purchased that if the same were erected and put in their place by and under the direction of one Angus McKay, selected for that purpose by the plaintiffs, the said plaintiffs would warrant that said cylinder when erected would work and subserve the purposes for which it was purchased by the defendant in a satisfactory manner; that said cylinder and apparatus were so purchased by the defendant to the knowledge of the plaintiffs to be run and operated in connection with a mill then in operation at the mine owned by the defendant, in the county of Park, State of Colorado, known as the —— mine.

The defendant further avers that prior to the completion and delivery of said cylinder the said mill with which it was to be worked and operated was burnt down, and that in the month of March or April, 1882, the plaintiffs entered into an agreement with the said defendant whereby said plaintiffs agreed to manufacture for and sell and deliver to the defendant herein a twenty-stamp dry-crushing silver mill and its connected apparatus.

That said dry-crushing mill and its said apparatus were so purchased by the defendant to the knowledge of the plaintiffs to be used, worked, and operated in connection with the cylinder hereinbefore mentioned, and at the time of said sale the said plain-

42 tiffs warranted and agreed that said twenty-stamp dry-crushing silver mill so sold and to be supplied by them to the defendant, together with the roasting cylinder and its apparatus

hereinbefore mentioned, should be of such character and quality in all their parts as to have the capacity of doing the work of a twenty-stamp dry-crushing mill efficiently and satisfactorily; and at the same time the said plaintiffs further warranted and agreed that if said dry-crushing mill and said cylinder and its apparatus were erected and put in place under the directions of one Angus McKay, selected for that purpose by the plaintiffs, they would erect and put the same in their proper places at the mine aforesaid, and would warrant and agree that the same when erected and put in their proper places would work properly and satisfactorily, and in all ways subserve the purposes for which they were purchased by the defendant in an efficient and satisfactory manner.

The defendant further avers that said mill, cylinder, and apparatus were delivered by the plaintiffs at the said mine of the defendant, in the State of Colorado aforesaid, and were erected and put into place by the plaintiffs and by and under the direction of said Angus McKay, selected for that purpose by the plaintiffs.

The defendant further avers that said mill, cylinder, and apparatus when erected and put into their places were defective in many particulars and wholly unfit for the purposes for which they were purchased; all of which was in violation of the aforesaid agreements and warranties of said plaintiffs made at the time of the purchase of said mill and cylinder as hereinbefore set forth.

43 The defendant further avers that the conveyor supplied in connection with said cylinder was a five-inch conveyor instead of a ten-inch conveyor, and that by reason of said conveyor being only of the dimension of five inches said mill was incapable of doing the work of a twenty-stamp mill; that the erection of said mill was completed about the 1st day of September, 1882, and that it was not until the month of January, 1883, that said plaintiffs removed said five-inch conveyor which they had supplied in connection with said mill and replaced it with a ten-inch conveyor which they had agreed to supply; and that in the meantime, to wit, between the 1st day of September, 1882, and the month of January, 1883, the defendant suffered great loss and damage through the incapacity of said mill by reason of said conveyor being only of the dimension of five inches to crush and grind the ore which the defendant had on hand ready to be crushed and ground and which said mill could have crushed and ground had said conveyor been of the agreed size, and that such loss and damage amounted to the sum of twenty thousand dollars.

The defendant further avers that said cylinder was improperly erected and set in its place, and was so improperly erected that it ground the face of the wheels upon which it rested, and the friction bands, by reason whereof said cylinder was constantly getting out of place; that had said cylinder been erected in a proper and workmanlike manner it would not have ground the face of said wheels and friction bands and would have remained in its place; that the consequence of said grinding of said wheels and friction bands through such improper erection of said cylinder was that the plaintiffs were put to great expense in obtaining new wheels, and said

friction bands and cylinder were so injured that they will
44 only last about a year, whereas without these injuries they would have lasted for four or five years; and a further consequence was that, through the displacement of said cylinder by the means herein alleged, said cylinder on many occasions between the 1st day of September, 1882, and the 1st day of January, 1883, was entirely useless and could not be used or worked, and during all the time that it was in such condition the operation — said entire mill and machinery had to be stopped and the defendant's work of grinding and crushing ore cease; that the defendant notified the plaintiffs of this defect in the erection of said cylinder at once, on its discovery, after the same was put into operation, and frequently thereafter notified them of the continuance of such defect, but that it was not until the latter part of December, 1882, that said plaintiffs remedied such defect and put said cylinder in proper working order; that said defendant itself, to ascertain what was necessary to remedy such defect by reason of the failure of the plaintiffs to remedy the same, expended and laid out the sum of $1,000 in examinations made by experts, and that the loss and damage to the defendant by reason of the premises set forth, connected with the improper erection of said cylinder, was the sum of eleven thousand dollars.

The defendant further avers that the salt-feeder, which was part of the apparatus connected with said mill, sold and delivered by the plaintiffs to the defendant under the agreements hereinbefore mentioned, was totally worthless and useless and unfit for the purposes for which it was sold and delivered, to the loss and damage of the defendant in the sum of one hundred and fifty dollars.

45 The defendant further avers that the wire cable of the tramway, which was also a part of the said apparatus connected with said mill, sold and delivered by the plaintiffs to the defendant under the agreements hereinbefore mentioned, was insufficient and defective in quality and unfit for the purposes for which it was so sold and delivered; that, by reason thereof and for the purpose of repairing said wire cables, frequent delays were caused in the working of said mill, and plaintiffs were compelled and required to purchase new wire cable in the month of January, 1883, to replace said insufficient and defective cable so sold and delivered as aforesaid by the plaintiffs to the defendant; that the loss and damage caused to the defendant and by reason of such insufficient and defective wire cable was the sum of $2,000.

The defendant further avers that the automatic feeder at the head of such tramway, being also part of the apparatus connected with said mill, sold and delivered by the plaintiffs to the defendant under the agreements hereinbefore mentioned, as erected by plaintiffs, was totally worthless and useless and unfit for the purposes for which it was furnished by the plaintiffs; by reason whereof the defendant was compelled to rebuild the same and did rebuild the same, to its loss and damage by reason of the premises in the sum of 500 dollars.

The defendant further avers that the brick furnaces at each end of the roasting and drying cylinder, which were part of the appa-

ratus connected with the said mill, sold and delivered by the plaintiffs to the defendant under the agreements hereinbefore mentioned, were built and constructed by plaintiffs in an insufficient, improper, and unworkmanlike manner, by reason whereof the defend-
46 ant has been compelled to repair the same, which would not have been necessary had they been built in a sufficient, proper, and workmanlike manner, and that the expense to which the defendant was put by reason of such improper, insufficient, and unworkmanlike construction of such furnaces was the sum of one hundred dollars.

The defendant further avers that the roof of the furnace connected with the drying cylinder, which was part of the apparatus connected with said mill, sold and delivered by the plaintiffs to the defendant under the agreements hereinbefore mentioned, was built by plaintiffs in an insufficient, improper, and unworkmanlike manner, by reason whereof said roof fell in; that by reason of such falling in of the roof of said furnace the defendant was compelled to stop the operations of said drying cylinder for some four or five days, and was compelled at a large expense to rebuild said roof, and that the loss and damage caused to the defendant by reason of the falling in of said roof and the rebuilding of the same and the consequent stoppage of said drying cylinder amounted to the sum of $750.

The defendant further avers that the fire-bricks, which were part of the apparatus connected with said mill, sold by the plaintiffs to the defendant under the agreements hereinbefore mentioned, were totally worthless, useless, and unfit for the purposes for which they were sold and delivered; that by reason thereof said defendant had to purchase other fire-brick from time to time to take their place, and that the replacement of said fire-bricks so required from time to time caused the stoppage of the operations of said entire mill for several days; that the loss and damage caused to said de-
47 fendant by reason of said fire-brick being worthless and unfit for the purposes for which they were purchased and by reason of having to replace them, and the consequent stoppage of said entire mill for the purpose of replacing the same, is the sum of $2,000.

Wherefore the defendant demands judgment by reason of the premises, and as an offset and counter-claim against the plaintiffs' causes of *other* set forth in their consolidated complaint herein, the sum of $36,500, with interest from the time of the commencement of this action.

III. For a third separate and distinct defence, and by way of counter-claim to all the causes of action set forth in the plaintiffs' consolidated complaint herein, the defendant avers that certain corrugated iron and fire-brick were part of the apparatus connected with the mill sold and delivered by plaintiffs, as set forth in the second defence contained in this answer, and so sold and delivered under the agreements mentioned and set forth in said second defence, to which said second defence and the allegations therein made as to said sale and delivery and agreements reference is hereby made, and that the said price of said corrugated iron and fire-brick is included in the promissory notes set forth in the first, second,

third, fourth, and fifth causes of action contained in the plaintiffs' consolidated complaint; that on or about the 1st day of July, 1882, said plaintiffs agreed with the defendant to account to it and reimburse it for all of such corrugated iron and fire-brick which was not merchantable; that there was of such corrugated iron not merchantable six hundred dollars' worth and of such fire-brick not merchantable two hundred and fifty dollars' worth, and that the
48 freight paid on the same by the defendant was the sum of three hundred dollars.

Wherefore the defendant demands judgment against the plaintiffs by way of counter-claim and by reason of the premises for the further sum of one thousand one hundred and fifty dollars, with interest from the first day of July, A. D. 1882.

IV. For a further separate and distinct defence to the cause of action set forth in the 6th cause of action contained in the consolidated complaint herein the defendant avers that amongst the goods alleged to have been sold and delivered by plaintiffs to the defendant in said 6th cause of action, and which are set forth in the account of said goods, wares, and merchandise filed herein, were one water tank, the price of which is therein stated at $55.00, and two overhead conveyors, the price of which is therein stated at $450.00; a pin and head for furnace, the price of which is therein stated at $11.00, and four carrying wheels for white furnace, the price of which is therein stated at $80.50.

The defendant further avers that said water tank was entirely worthless and useless when delivered to the defendant and was entirely unfit for the purposes for which it was sold and delivered by the plaintiffs to the defendant, and which purposes were known to the plaintiffs when the said water tank was ordered from them by the defendant.

The defendant further avers that said two overhead conveyors and pin and head and four carrying wheels were furnished by the plaintiffs to the defendant as part of the cylinder and appa-
49 ratus mentioned and described in the second defence contained in this answer, and which said cylinder and apparatus were sold by said plaintiffs to the defendant on agreement that the same should be erected and put in their places by the plaintiffs under the directions of one Angus McKay, and that if so erected they would work in an efficient, proper, and satisfactory manner; that at the time of the sale of said cylinder and apparatus it was agreed between the plaintiffs and the defendant that the conveyors connected with said cylinders should be ten-inch conveyors; that said cylinder was erected by the plaintiffs and under the directions of said Angus McKay, and were erected in an improper and unworkmanlike manner, and through being so improperly erected said cylinder injured the four carrying wheels and the pin and head, which were a part of said apparatus, and necessitated new ones being obtained by the defendant to take their place, and that said pin and head and four carrying wheels referred to in the account above mentioned are the same pin and head and four carrying wheels which were so supplied by plaintiffs to the defendant to take the place of

those previously supplied, and which had been rendered useless by the imperfect and defective working of the cylinder as erected as hereinbefore set forth, and were not sold by the plaintiffs to the defendant as alleged in said complaint.

That the conveyors delivered by the plaintiffs to the defendant were five-inch conveyors instead of ten-inch conveyors, which it was agreed they should be, as hereinbefore set forth, and that the two conveyors referred to in said account of the goods, wares, and
50 merchandise alleged to have been sold by the plaintiffs to the defendant in said sixth cause of action were supplied by the plaintiffs to take the place of the five-inch conveyors before mentioned, and were not sold by the plaintiffs to the defendant as alleged in said complaint.

(S'g'd) EDWARD O. WOLCOTT,
Def'd't's Att'y.

(Endorsed:) No. 1102. In the circuit court of the United States for the district of Colorado. David R. Fraser *et al. vs.* The New York and Colorado Mining Syndicate and Company. Answer to consolidated complaint. Filed Aug. 25, 1883. Edward F. Bishop, clerk. (S'g') Edw'd O. Wolcott, def't's att'y.

And afterwards and on, to wit, the 16th day of October, A. D. 1883, came again the said plaintiffs, by Messrs. Teller & Orahood and Amos Steck, their attorneys, and filed in said court and in said cause their replication to the answer to consolidated complaint heretofore filed herein; and the said replication is in words and figures as follows, to wit:

Replication.

UNITED STATES OF AMERICA, *District of Colorado,* } *ss:*

In the Circuit Court of the United States for the District of Colorado.

51 DAVID R. FRASER and THOMAS CHALMERS, Copartners, Trading and Doing Business under the Firm Name and Style of Fraser and Chalmers, Plaintiffs,

vs.

THE NEW YORK AND COLORADO MINING SYNDICATE AND COMPANY, Defendant.

The replication of the plaintiffs herein to the answer of the defendant to the consolidated complaint of the said plaintiffs.

I. The said plaintiffs, replying to the first defense of the defendant to the first five causes of action set forth in plaintiffs' complaint, say that they deny that at the city of Chicago or anywhere else, in or about the month of November, A. D. 1881, or at any other time, the plaintiffs entered into an agreement with the defendant by which said plaintiffs agreed to manufacture and sell and deliver to the defendant for or at a price then agreed upon any roasting cylinder

and the apparatus attached thereto, or to erect and put the same in place at the mine in said defense mentioned, and denies that the roasting cylinder and the attachments thereto were to have been of the dimensions, character, or description as in said first defense is mentioned; deny that it was agreed between the plaintiffs and defendants at any time that the said cylinder and connecting apparatus was to have been erected or put in place by or under the direction of the said Angus McKay, or that the said McKay was selected for such purpose by the plaintiffs; deny that the said
52 plaintiffs warranted that said cylinder when so erected would work or subserve the purposes for which it was purchased by the said defendant in any manner whatever; deny that said cylinder and apparatus were purchased with the knowledge of the plaintiffs to be run or operated in connection with a mill of the defendant situate in Park county or anywhere else; deny that in the month of March or April, 1882, or at any other time, the plaintiffs and defendant entered into any agreement whereby said plaintiffs agreed to manufacture for and sell and deliver to the defendant a twenty-stamp dry-crushing silver mill and its connecting apparatus; deny that the said plaintiffs warranted or agreed that the said twenty-stamp dry-crushing silver mill, together with the roasting cylinder and its apparatus, were to have been of such a character or quality in its parts as to do the work of a twenty-stamp dry-crushing mill efficiently or satisfactor-y; deny that the plaintiffs warranted or agreed that the said dry-crushing mill and said cylinder and its apparatus were to be erected or put in place by the said Angus McKay; deny that said McKay was selected by the plaintiffs for said purpose; deny that they warranted or agreed that the same when erected and put in their proper places would work properly or satisfactorily or in any way subserve the purposes for which the defendant purchased the same in an efficient or satisfactory manner; deny that said mill, cylinder, & apparatus were delivered by the plaintiffs at the mine of the said defendant as stated in the said first defense of the said defendant; deny that they were erected or put in place by the plaintiffs or by and under the direction of the said Angus McKay, or denies that said McKay was selected for the said purpose by the said plaintiffs;
53 deny that the receipt and delivery of said mill, cylinder, and apparatus or at any other time, either before or after their erection or operation, the said defendant paid for said mill or its connected apparatus, either in cash or by promissory notes, or partly in cash or partly in promissory notes, sued upon in the first five causes of action in the complaint of plaintiffs mentioned; deny that before or after that time the purchase price of said cylinder and its apparatus was fully paid for by the said defendant; deny that said mill and apparatus at any time was defective in any particular or in anywise unfit for the purposes for which they were purchased by the defendant, and deny that there was any violation of any agreement whatever with the plaintiffs made by the defendant as to the purchase of said mill & cylinder, as in said answer is set forth; deny that the conveyor mentioned in said answer was a five-inch con-

veyor instead of a ten-inch conveyor; deny that it was improperly erected or set in place; deny that it failed to work or be of service to the defendant, or that it was not constructed and erected in accordance with the agreement by the plaintiffs and defendant; deny that the salt-feeder, a part of the apparatus of the said mill, was useless or worthless or unfit for the purposes for which it was purchased by the defendant; deny that the fire-brick for lining any of the machinery of said mill, being part of said apparatus of said mill, was worthless or could not be used for the purposes for which they were furnished or for which the same was necessary; deny that the wire-work of the tramway part of said apparatus was insufficient or defective in quality or unfit for the purposes for which it was furnished;

deny that the automatic feeder of said apparatus was defect-
54 ive or insufficient or unfit for the purposes for which it was furnished; deny that the consideration for said notes set forth in the first five causes of action in the consolidated complaint of the said plaintiffs failed in part or in the whole.

II. To the second separate defense or counter-claim to all the causes of action in the plaintiffs' complaint mentioned the plaintiffs, replying, say that they deny that, at the city of Chicago, in Illinois, or at any other place, in or about the month of November, A. D. 1881, or at any other time, they entered into any agreement with the defendant whereby they agreed to manufacture and sell and deliver to the defendant at any price any roasting cylinder or any apparatus connected therewith, or to erect or put in place the same at any mine of the said plaintiffs whatever, & deny that the said cylinder & apparatus are correctly described in said 2d separate defense and counter-claim of the said defendant; deny that it was agreed between the plaintiffs and defendant at any time that said cylinder and connected apparatus were purchased by the defendant from the said plaintiffs to be erected and put in place by the said Angus McKay; deny that said McKay was selected by the plaintiffs for said purpose, and deny that they warranted when so erected by said McKay that the same would work or subserve the purposes of the defendant in any satisfactory manner whatever; deny that the said cylinder and apparatus were purchased by the defendant with any knowledge of the plaintiffs to be run or operated in connection with a mill then or at any time owned by the defendant in the county of Park or in any other county; deny that prior to the completion or delivery of said cylinder the said mill of defendant was burned

down; deny that in the month of March or April, 1883, or
55 at any other time the plaintiffs entered into any agreement with the defendant whereby the plaintiffs agreed to manufacture for or sell and deliver to the defendant a twenty-stamp crushing silver mill or its connected apparatus; deny that said crushing mill and its apparatus were purchased by the defendant, with the knowledge of the plaintiffs, to be used, worked, and operated in connection with the cylinder aforesaid, and deny that at any time the said plaintiffs warranted or agreed that the said twenty-stamp dry-crushing mill, together with the roaster aforesaid & its apparatus, should be of such character or quality in any of its parts

as to have the capacity of doing the work of a twenty-stamp mill—dry-crushing mill—efficiently or satisfactorily; and deny that at any time the said plaintiffs further warranted or agreed that if said dry-crushing mill and said cylinder and its apparatus were erected and put in place under the direction of one Angus McKay they would erect and put the same in proper places at the said mine; and deny that they warranted or agreed that the same, when erected & put in their proper places, would work properly or satisfactorily, or in any way subserve the purposes for which they were purchased by the defendant in an efficient or satisfactory manner; deny that said mill, cylinder, and apparatus were erected or put in their places by them (the plaintiffs) under the direction of said McKay, and deny that they selected said McKay for that purpose; deny that said mill or cylinder and apparatus, when erected, were defective in any particular or were unfit for the uses for which they were purchased, or that they violated their agreement with the said defendant at
56 any time or in — particular; deny that said conveyor connected with said cylinder was a five-inch conveyor, and was incapable of doing the work of a twenty-stamp mill by reason of its size being of the dimensions of five inches; deny that they agreed to supply a ten-inch conveyor instead of a five-inch one, but admit that they did so, as stated in defendant's answer, but deny that the defendant suffered any loss or damage by reason of said conveyor being of the dimensions of five inches only, and deny they agreed to make the same of the size of ten inches, or warranted that the said five-inch conveyor would convey all the ores ground by said mill or crushed by said mill, and deny that the defendant sustained any loss or damage whatever by reason of the size of said conveyor being five inches instead of ten inches in size; deny that said cylinder was improperly erected and set in place; deny that the plaintiffs erected the same or caused the same to be erected or put in place; deny that the defendant was put to any expense in consequence of any improper erection of said cylinder; deny that said cylinder was useless for any length of time whatever or that the same could not be used or worked for any length of time; deny that the mill had to be stopped and the process of crushing the ores had to cease for any time on account of any imperfection in said cylinder; deny that the plaintiffs were notified of the said stopping of the mill or of the imperfection of said cylinder or of its improper erection at any time or of the defects in said cylinder; deny that the defendant expended or laid out any money whatever in examination of the said cylinder and its apparatus by any experts; deny that the defendant sustained any damage whatever by reason of the stoppage of said mill or by the improper erection of said cylinder; deny that the said feeder
57 connected with said mill was totally worthless or useless or unfit for the purposes for which it was purchased by the defendant; deny that they sustained any loss or damage by reason of any imperfection in the said salt-feeder; deny that the wire cable of the tramway connected with said mill was insufficient in quality or unfit for the purposes for which it was purchased by the defendant; deny

that any delay was occasioned in running or operating said mill and machinery by reason of any imperfection or insufficiency in said wire cable; deny that the defendant suffered any loss or damage by reason of any imperfection or defectiveness in the construction or quality of said wire cable; deny that the automatic feeder connected with said tramway purchased by the said defendant was useless or unfit for the purposes for which the same was bought by the said defendant; deny that the defendant sustained any loss or damage by reason of any imperfection or insufficiency in said automatic feeder; deny that the brick furnaces connected with said roaster and drying cylinder were built or constructed in an insufficient, improper, or unworkmanlike manner; deny that the defendant sustained any loss or damage by reason of any improper, insufficient, or unworkmanlike construction of said furnaces; deny that the roof of the furnace connected with the drying cylinder connected with said mill was constructed or built by the plaintiffs; deny that the said roof was constructed or built in an insufficient, improper, or unworkmanlike manner; deny that said roof fell in by reason of any improper construction of the same by these plaintiffs; deny that any delay in the operation of said mill and machinery was occasioned by any defect in the building or construction of said roof;

58 deny that the defendant was compelled to stop the operations of said drying cylinder for any period of time; deny that the defendant was compelled to rebuild said roof or expend any money in its repair or reconstruction; deny that the defendant sustained any loss or damage by reason of any unskillful erection of said roof or by reason of any imperfect material used in the construction of the same; admit that the defendant sustained damage by reason of the falling in of said roof if the said roof fell in; but having no knowledge or information or sufficient knowledge or information upon which to base any relief, the plaintiffs deny that the said roof fell in as stated in the said separate defence and counter-claim; deny that the fire-bricks connected with said mill were worthless, useless, or unfit for the purposes for which the defendant purchased them; deny that the defendant had to purchase other fire-brick to replace any fire-bricks at any time sold by the plaintiffs to the defendant, or that the mill and machinery attached were required to be stopped on account of the unfitness of said brick; deny that the defendant sustained any loss or damage by reason of said fire-brick being worthless, or that the defendant ever replaced the said fire-brick by other fire-brick, or that any loss or damage was sustained by the defendant by reason of the stopping of the mill & machinery connected therewith by reason of said supposed worthless fire-brick.

III. And the plaintiffs, replying to the third separate and distinct defense and counter-claim of the said defendant in its said answer contained, says that the corrugated iron and fire-brick connected with said mill was and is not any part of the consideration of the promissory notes set forth in the first five separate cases of action set forth in the consolidated complaint of the said plaintiffs, and deny that on the first day of July, A. D. 1882, or at any other time,

59 the said corrugated iron or fire-brick or either of them or any part or portion thereof was not merchantable corrugated iron or merchantable fire-brick; deny that of said corrugated iron six hundred dollars' worth or any other value or sum or part or portion of said corrugated iron was not merchantable, and deny that two hundred and fifty dollars in value of said fire-brick was not merchantable or any portion or part of the same was not merchantable, and deny that the defendant paid any freight thereon; deny that the defendant paid freight on the same to the amount of 300 dollars or in any other sum whatever, and deny that the defendant sustained any damage or loss by reason of the imperfection or unmerchantable quality of said corrugated iron or fire-bricks.

IV. And the plaintiff, replying to the last separate and distinct defense to the cause of action contained in the 6th separate claim or demand of the plaintiffs, say that they deny that the said water tank was entirely worthless or useless or in anywise unfit for the purposes for which it was sold and delivered to the defendant; deny that the two overhead conveyors or the pin or head or any of the carrying wheels, part of the apparatus of said cylinder in said separate defense mentioned, were erected or put in their places by the plaintiffs or by their direction, but admit that the same were erected and put in their places by the said Angus McKay, employed by the said defendant and not by these plaintiffs, and these plaintiffs neither admit or deny that the said mentioned overhead conveyors or the pin or head or the carrying wheels worked in an inefficient, improper, or unworkmanlike manner, for the reason that they
60 have not nor can they obtain sufficient knowledge or information upon which to base any belief whether the same worked in an efficient, proper, or workmanlike manner or not, but these plaintiffs deny that they warranted or agreed that the same would work in an efficient, proper, or workmanlike manner; deny that it was agreed between the plaintiffs and defendant at any time that the conveyors connected with said cylinder should be ten-inch conveyors; deny that said cylinder was erected by the plaintiffs, but admit that it was erected by the said Angus McKay, or under his direction, employed by the said defendant, and whether erected in an improper or unworkmanlike manner these plaintiffs have not and cannot obtain sufficient knowledge or information upon which to base any relief; deny that the conveyors were agreed to be ten-inch conveyors or that any agreement was made by the plaintiffs with the defendant that the said conveyors were to have been ten-inch conveyors.

(S'g'd) TELLER & ORAHOOD AND AMOS STECK,
Attorneys for Plaintiffs Fraser & Chalmers.

(Endorsed:) No. 1102. Fraser & Chalmers *vs.* The New York & Colo. Syndicate and Mining Company. Replication to answer. Filed Oct. 16, 1883. (S'g'd) Edward F. Bishop, clerk. Teller & Orahood and Amos Steck, att'ys for pl'ffs.

And afterwards and on, to wit, the 14th day of December, A. D. 1883, the same being one of the regular juridical days of the
61 October term, A. D. 1883, of said court—present, the Honorable Moses Hallett, district judge—the following proceeding was had and entered of record in said court and in said cause, to wit:

Order. Trial, Jury, Finding, and Judgment.

DAVID R. FRASER *et al.*
vs.
THE NEW YORK AND COLORADO MINING SYNDICATE AND COMPANY. } 1102.

Action on a promissory note.

At this day came the said plaintiffs, by Amos Steck, Esq., their attorney, and the said defendant, by E. O. Wolcott, Esq., its attorney, also comes.

And thereupon comes a jury, to wit: 1, Edward J. Sanderlin; 2, John B. Ballard; 3, Thomas Gammon; 4, William Sawtell; 5, James D. Ranklin; 6, Gregory Board; 7, Charles J. Cole; 8, John Shea; 9, Matt. Finehart; 10, Morris Thomas; 11, James McKinley; 12, W. H. Thompson, twelve good and lawful men, and they are duly selected and tried, impannelled, and sworn to well and truly try the issues herein joined and a true verdict render according to the evidence.

And the said jurors, having heard the evidence produced herein and the instructions of the court, upon their oaths do say they find the issues herein joined for the said plaintiffs, and assess their damages at twelve thousand nine hundred and eighteen dollars and fifty-eight cents ($12,918.58).

62 Wherefore, on motion of the said plaintiffs, it is ordered by the court that judgment be entered herein in favor of the said plaintiffs and against the said defendant for the sum of twelve thousand nine hundred and eighteen dollars and fifty-eight cents ($12,918.58) and the said plaintiffs costs, to be taxed.

And thereupon and on the same day, to wit, the 14th day of December, A. D. 1883, judgment was duly entered against the said defendant in the judgment book of said court in pursuance of the statutes and rules of court; and the said judgment is in words and figures as follows, to wit:

Judgment.

DAVID R. FRASER and THOMAS CHALMERS, Copartners, Trading and Doing Business under the Firm Name and Style of Fraser and Chalmers,
vs.
THE NEW YORK AND COLORADO MINING SYNDICATE AND COMPANY. } 1102.

Action on a promissory note and an account.

On this 14th day of December, A. D. 1883, the same being one o

the regular juridical days of the October term, A. D. 1883, of said court, there being present the Honorable Moses Hallett, district judge—

It is considered by the court that the said plaintiffs do have and recover of and from the said defendant twelve thousand nine
63 hundred and eighteen dollars and fifty-eight cents ($12,918.58), their damages by occasion of the premises in their complaint mentioned, in form aforesaid assessed, and their costs by them in this behalf laid out and expended, to be taxed, and have execution therefor.

And afterwards and on, to wit, the 25th day of January, A. D. 1884, the same being one of the regular juridical days of the October term, A. D. 1883, of said court—present, the Honorable Moses Hallett, district judge—the following proceeding, *inter alia*, was had and entered of record in said court and in said cause, to wit:

Order. E. O. Wolcott Withdraws His Appearance.

DAVID R. FRASER *et al.*
vs.
THE NEW YORK & COLORADO MINING SYNDICATE AND COMPANY. } 1102.

Action on promissory note and account.

At this day comes E. O. Wolcott, Esq., attorney, and withdraws his appearance as attorney herein on behalf of the said defendant.

And afterwards and on the same day, to wit, the 25th day of January, A. D. 1884, the following further proceeding was had and entered of record in said court and in said cause, to wit:

64 *Order. Motion to Vacate Judgment and for a New Trial Denied.*

DAVID R. FRASER *et al.*
vs.
THE NEW YORK AND COLORADO MINING SYNDICATE AND COMPANY. } 1102.

Action on a promissory note and account.

At this day come the said plaintiffs, by Amos Steck, Esq., their attorney, and the said defendant, by J. N. Bentley, Esq., its attorney, also comes.

And the motion of the said defendant and the affidavits in support thereof to vacate the judgment lately had herein, and for a new trial of the issues herein joined, coming on now to be heard, is argued by counsel, and the court being now sufficiently advised in the premises—

It is ordered by the court, for good and sufficient reasons to the court appearing, that the said motion be denied.

And afterwards and on, to wit, the 31st day of January, A. D. 1884, the same being one of the regular juridical days of the October term, A. D. 1883, of said court—present, the Honorable Moses Hallett, district judge—the following proceeding was had and entered of record in said court and in said cause, to wit:

Order. Granting New Trial.

65 DAVID R. FRASER and THOMAS CHALMERS, Copartners, Trading and Doing Business under the Firm Name and Style of Fraser and Chalmers,
vs.
THE NEW YORK AND COLORADO MINING SYNDICATE AND COMPANY. } 1102.

Action on promissory notes and accounts.

The defendant's renewed application for a new trial in this cause coming on to be heard, after hearing counsel for the respective parties, and the court being duly advised in the premises—

It is hereby ordered and directed by the court that a new trial of this cause be had upon the conditions following, to wit: The defendant shall forthwith pay to the plaintiffs' attorneys for the plaintiffs all the costs in the action up to this date and included in the judgment herein, and also the sum of three thousand dollars, which shall be credited to the defendant upon any judgment which may be obtained by the plaintiffs against the defendant upon such new trial. In case the plaintiffs shall not recover judgment against the defendant, then the said three thousand dollars shall be refunded by the said plaintiffs to the defendant, and in case the plaintiffs shall recover a judgment upon such new trial for an amount less than three thousand dollars, then the said plaintiffs shall refund to the defendant the difference only. The defendant shall also pay the costs which have been incurred upon the execution when the amount of the same shall have been ascertained.

66 It is further ordered that the judgment heretofore entered in this cause shall stand as security to the plaintiffs until the entry of a new judgment upon such new trial; that the execution and all proceedings thereon shall be stayed upon the payment to the plaintiffs of the costs in the action before mentioned and the said three thousand dollars.

And afterwards and on, to wit, the 9th day of May, A. D. 1884, the same being one of the regular juridical days of the May term, A. D. 1884, of said court—present, the Honorable Moses Hallett, district judge—the following proceeding was had and entered of record in said court and in said cause, to wit:

Order. Leave to File Amended Answer.

DAVID R. FRASER *et al.*
vs.
THE NEW YORK AND COLORADO MINING SYNDICATE AND COMPANY. } 1102.

Action, a promissory note and an account.

At this day come the said plaintiffs, by Willard Teller, Esq., their attorney, and the said defendant, by J. A. Bentley, Esq., its attorney, also comes.

And thereupon the said defendant, here in open court, prays leave of the court to amend its answer herein; and the court being now sufficiently advised in the premises—

It is ordered by the court, for good and sufficient reasons to the court appearing, that the said defendant have leave to file
67 herein an amended answer as it shall be advised.

And afterwards and on, to wit, the 10th day of May, A. D. 1884, came again the said defendant, by Messrs. Bentley & Vaile, its attorneys, and filed in said court and in said cause its amended answer; and the said amended answer is in words and figures as follows, to wit:

Amended Answer.

United States Circuit Court, District of Colorado.

DAVID R. FRASER and THOMAS CHALMERS, etc.,
against
THE NEW YORK AND COLORADO MINING SYNDICATE AND COMPANY.

The defendant, for an amended answer to the consolidated complaint herein and to each of the several causes of action therein set forth, shows to the court that it admits the making of the several promissory notes described in said complaint; that payment thereof was refused at maturity; but denies that the defendant is liable to pay the plaintiffs any sum whatever on account of said notes or either of them, and further denies that about the 25th of July, 1882, or at any other time, the plaintiffs sold and delivered to the defendant the goods and chattels referred to in the sixth cause of action set forth in said complaint, of the value of two
68 thousand five hundred and thirty-one dollars and seventy-eight cents or of any value whatever.

And, further answering, the defendant alleges that by virtue of two several agreements, the first of which was made about November, 1881, and the second, which was an additional and supplemental agreement relating to the same and kindred subject matter, made about March or April, 1882, the plaintiffs agreed with the defendant to supply to it certain machinery, apparatus, and material for a mill for the reduction of silver ores, which machinery

and apparatus were by said agreements, which were partly in writing and partly oral, to be properly set up and put in place under the superintendence of one Angus McKay, who was designated and selected by the plaintiffs as an expert and skillful person for the purpose, within a reasonable time after the last-named date, so as to be ready to run and operate as a twenty-stamp dry-crushing silver mill of full capacity, at defendant's mine near Columbus, in Chaffee county, State of Colorado, the defendant agreeing to pay the purchase price of said machinery and apparatus, and also to pay all expenses for labor and material necessary for the setting and placing of the said machinery and apparatus, and also to pay for the superintendence of such setting and placing by said McKay; that about the month of July, 1882, and before the said machinery and apparatus had been supplied and put in place and while the plaintiffs were still engaged upon compliance with said original and supplemental agreements, the defendant, at the plaintiffs' request and for their accommodation, gave to them certain written promises in the form of notes and drafts, payable at a future day or days, for the balance
69 which the plaintiffs claimed would be due them upon the purchase price of said machinery, material, and apparatus, the defendant believing that the plaintiffs would proceed to the proper performance and complete execution of the said agreements, and would make good certain defective material furnished by them by substituting in place thereof other material not defective, or by making allowance therefor upon some subsequent settlement; that when the said promise or promises matured the plaintiffs had not yet fully complied with their said agreements, but were still engaged thereupon or in endeavoring to remedy certain defects, deficiencies, and imperfections in the machinery and apparatus supplied by them, or in the placing of the same under the superintendence of the said McKay, said promise or promises were renewed and thereafter further renewed, from time to time, until the 2nd day of December, 1882, when, the said agreements and undertakings of the plaintiffs still remaining in part unperformed and the plaintiffs being still engaged as aforesaid in remedying said defects, deficiencies, and imperfections in the said machinery and apparatus supplied by them, or in the placing of the same under the superintendence of said McKay, although ample and reasonable time for the performance of said agreements had long since elapsed, the defendant again renewed the said promise or promises by making and delivering to the plaintiffs the promissory notes described in the first five causes of action in the complaint set forth.

And the defendant further shows that certain material furnished by the said plaintiffs was defective and worthless and the price thereof was included in said promises; that parts and por-
70 tions of the said machinery and apparatus furnished by the plaintiffs under the said agreements were imperfect and defective and not fit for the purpose for which they were purchased, and parts and portions of said machinery and apparatus which were set up and placed under the direction of the said McKay, selected as aforesaid by the plaintiffs for the purposes, were improperly and

unskillfully set up and placed and not in a workmanlike manner; and, after being set up, said mill, machinery, and apparatus did not and would not work and operate properly and satisfactorily, and the defendant was thereby and by reason thereof put to great expense and trouble for repairs, changes, and replacements, and suffered great delay and loss of time in the use of said machinery and apparatus and of the services of the persons employed by him to operate the same, and in the wasteful consumption of fuel, oil, and material, and otherwise greatly damaged, altogether in a sum greatly in excess of the whole amount claimed by the plaintiffs in this action.

And the defendant further shows that a considerable portion of the goods and chattels alleged in the plaintiffs' sixth cause of action to have been sold to the defendant consists of apparatus, material, and pieces of machinery which were furnished and supplied by the plaintiffs under their aforesaid agreements, the price of which was included in the said promises, and still another considerable portion of said goods and chattels consists of apparatus, material, and pieces of machinery furnished and supplied by the plaintiffs, to be substituted for and to take the place of defective and imperfect material and apparatus which had been supplied under their said agreements, or to take the place of parts of the machinery or ap-
71 paratus which had been as aforesaid supplied and furnished by them, and had been injured, worn out, or destroyed by reason of the unskillful and improper setting and placing of the said machinery as aforesaid under the direction of the said McKay, selected by the plaintiffs for that purpose, and still another portion of said goods and chattels were defective and unfit for the purpose for which they were furnished, and worthless. Wherefore the defendant demands the judgment of the court that the plaintiffs take nothing by their action, and that the defendant have and recover its costs from the plaintiffs.

Second. And for a second and separate answer and defence to all the causes of action described in the plaintiffs' complaint, and as a counter-claim, the defendant shows to the court that at all the times mentioned in the complaint and at all the times hereinafter mentioned the plaintiffs were manufacturers and dealers in machinery, and particularly in mining machinery, apparatus, material, and supplies of various sorts, in the city of Chicago, in the State of Illinois, and held themselves out as experts and as skilled and competent in their said business, which also included the erection and superintending the erection of and setting in place mining machinery and apparatus supplied by them; that on or about November, 1881, the defendant was engaged in working a mine and operating a ten-stamp mill, wet process, to reduce the ore thereof, at or near Columbus, in the county of Chaffee, in the State of Colorado, the principal part of machinery for which has been supplied by the plaintiffs; that the defendant had determined to change its method of treating the ores of its said mine of said mill from the wet process to the dry process, and to add to its machinery a white roasting cylinder and necessary machinery and apparatus, and its man-

72 aging officers, being ignorant in respect to the machinery and apparatus necessary and suitable for the purpose, for and on behalf of the defendant, applied to the plaintiffs in their aforesaid character of skilled and competent persons to supply the said roasting cylinder and to recommend and supply to the defendant the additional necessary and suitable machinery and apparatus for the purposes aforesaid, and all of sufficient dimensions, proportions, and capacity to properly operate with and as a part of a twenty-stamp mill, should the defendant afterwards increase the capacity of the other machinery of *their* said mill to a twenty-stamp mill; that the said plaintiffs thereupon offered to sell to the defendant, and, about the month of November, 1881, for sufficient considerations hereafter mentioned, then agreed upon, agreed to supply to said defendant the said roasting cylinder and the required machinery and apparatus, particularly specified and described by the plaintiffs at the times, as follows, to wit: one roasting cylinder, fifty-two inches in diameter, about twenty-seven feet long, and made in sections from cast iron, all complete, with driving trucks and gear; all bolts and joining sections, together with the necessary nuts for the same, and all binders for brick-work; one dry floor, ten feet wide by thirty feet long, one-quarter of an inch in thickness, jointed with straps riveted on one piece so as to make floor flush on top, the other piece to be riveted to strap at mill; one set of grate bars forty-two inches long; one fire front complete, with doors and bearing bars; one ore car, regular style; one conveyor complete, with gear, to be about twenty feet long and ten inches in diameter; one elevator complete, with buckets, belts, shafting, pulleys, etc.; one salt-feeder, one salt-grinder,
73 and all shafting, pulleys, and belting necessary for driving the above-described machinery.

And it was also agreed between the parties that the said roasting cylinder, machinery, and apparatus should be set up and placed at the defendant's said mill under the direction and superintendence of one Angus McKay, who was designated and selected by the plaintiffs as an expert and skillful person for that purpose, and the defendant on its part to pay the purchase price of said machinery and apparatus and all expenses of setting up and placing the same, including labor and material and of superintendence by said McKay.

And the defendant further shows that the plaintiffs thereafter proceeded to furnish and supply the said roasting cylinder, machinery, and apparatus, so agreed to be furnished by them, but before the same had been supplied, erected, and put in place, as provided for under the said agreement, the defendant's said mill was destroyed by fire, and thereupon and about the month of March or April, 1882, the plaintiffs and the defendant, upon good and sufficient considerations hereinafter mentioned, made an additional and supplemental agreement, partly written and partly oral, to the effect following, to wit: The plaintiffs agreed that using and utilizing such parts of the machinery and apparatus of the mill which had as aforesaid been burned as could be renovated, repaired, and fit to be incorporated as a part of the new machinery, and also using the

machinery and apparatus which they had already as aforesaid contracted to supply to the defendant, the machinery and apparatus necessary to be used in rebuilding the defendant's said mill, including engines, stamps, and all other machinery and apparatus
74 for a twenty-stamp dry-crushing silver mill of full capacity; and the plaintiffs further agreed that said mill should be erected and said machinery, apparatus, and connections should be set up and put in place by and under the direction of the aforesaid Angus McKay, who was employed by the plaintiffs to superintend the erection of mining mills and the placing of mining machinery and apparatus supplied and sold by them, the plaintiffs agreeing and representing to the defendant that the said mill, machinery, and apparatus, when erected and set up under the direction and superintendence of the said McKay, would be properly erected, set up, and placed so that the same would run, operate, and work properly as a twenty-stamp dry-crushing silver mill; and further agreed that said mill, machinery, apparatus, and connections should be supplied, set up, and placed at the site where the defendant's mill had as aforesaid burned down within a reasonable time after the making of the last-named supplemental agreement in March or April, 1882, the defendant upon its part agreeing to pay the purchase price of said machinery and apparatus so to be supplied by the plaintiffs, and also to pay all expenses for labor and additional material necessary for the setting up and placing of the said machinery and apparatus, and also to pay for the superintendency of the erection of said mill and placing and setting up of said machinery and apparatus by the said McKay, selected by the plaintiffs for that purpose, as above stated.

And the defendant further shows that the plaintiffs thereupon proceeded to manufacture and supply machinery and apparatus for the defendant's said mill and the said McKay to erect said
75 mill and set up and place the said machinery and apparatus as it had been provided in and by the said agreement should be done, the defendant meantime paying upon the purchase price and the expenses as it had as aforesaid agreed to do, and the defendant alleges that ample and reasonable time for the supplying of the said machinery and apparatus and the erection of said mill and setting up and placing of the said machinery and apparatus as provided by the said agreements had fully elapsed and passed by on or about the 4th day of September, 1882; that on or about the said 4th day of September, 1882, the said McKay informed the defendant that he had concluded the work of erecting said mill and placing of said machinery and apparatus, and that said mill was ready to run and operate, and there and then turned the same over to the defendant as complete under the said agreements.

And the defendant further shows that the proper operation of said mill required a considerable number of persons, both skilled and ordinary laborers, as well as a competent foreman and superintendent, to be permanently employed, and the defendant, relying upon the knowledge and skill of the plaintiffs and of the said McKay, selected by them as aforesaid to superintend the erection of said

mill and direct the setting and placing of the said machinery and apparatus, and believing that the said mill, machinery, and apparatus and the erection and placing of the same was in all respects in accordance with plaintiffs' said agreements, and that the said mill was ready to be run and operated, employed the necessary complement of persons to man the machinery, apparatus, and mill and work the same in the reduction of defendant's ores, and commenced to operate the said mill; and defendant states that it was very
76 soon discovered that the said mill, machinery, apparatus, and connections which had as aforesaid been erected, set up and placed under the direction and superintendence of said McKay by virtue of the said agreements, did not and would not move, work, and operate properly, and notice thereof was immediately given to the plaintiffs.

And the defendant further shows that the said improper movement, working, and operation *was* caused by imperfections, defects, and deficiencies in those portions of the machinery and apparatus of said mill so as aforesaid supplied by the plaintiffs, particularly for the treatment and reduction of ores and the handling of the same, and by the failure of some parts thereof to correspond in dimensions to the specifications therefor contained in the said agreements and in the unskillful and improper placing of portions of machinery and apparatus by and under the direction of the said McKay, selected by the plaintiffs for the purpose, and in the unskillful and improper construction of certain furnaces, arches, roofs, and supports, and the use of poor and inferior material, furnished by the plaintiffs in such constructions, made by and under the direction of the said McKay in connection with the placing of said machinery and apparatus, the construction of said furnaces, arches, roofs, and supports there and then being a portion of the necessary work of erecting said mill and setting and placing of the said machinery and apparatus by him placed as aforesaid; that by reason of the said deficiencies and imperfections in the said machinery and apparatus and the failure of parts thereof to correspond in dimensions to the specifications therefor, and the said improper and unskillful placing of the same by and under the direction of
77 the said McKay, and the said improper and unskillful construction of the said furnaces, arches, roofs, and supports, and the use of said poor and inferior material in said construction by the said McKay, the said machinery and mill did not work as a twenty-stamp dry-crushing mill of full capacity; and, on the other hand, often times did not and could not work at all, and at other times was idle and shut down in order to facilitate repairs and replacements which had to be made, and the readjustment of the said machinery and apparatus or to facilitate the remedying of the aforesaid defects, deficiencies, and imperfections therein, and in the setting and placing thereof; and at other times said mill, machinery, and apparatus worked at a rate greatly below what it should have done, and crushed and reduced a much less quantity of the defendant's ore than it would have crushed and reduced but for the defects, deficiencies, and imperfections hereinbefore mentioned, and much less than a

twenty-stamp dry-crushing silver mill of the same kind, of full capacity, properly constructed, set up, and put in place, would have crushed and reduced.

And the defendant further shows that the plaintiffs failed and neglected for a long time after they were as aforesaid notified to remedy the said defects and deficiencies in the said machinery and in the setting and placing of the same, and, in fact, never did completely remedy the same; and the defendant alleges that by reason of the premises above set forth he suffered great loss of time in the use and work of said mill, and in the labor of the persons aforesaid permanently employed to man and operate the same, and in their wages for the time so lost, amounting to a large sum of money, which the defendant was obliged to and has paid; that while the
78 said mill was so idle as aforesaid the fires of the furnaces and engines necessarily consumed and wasted a large amount of fuel and material, the value of which was entirely lost to the defendant, because the said machinery and apparatus for the treatment and reduction of the ore would not and could not properly work and operate as aforesaid; and, further, the use of said mill, machinery, and apparatus when in operation was of much less value to the defendant than it would have been had it worked and operated properly at the full capacity of a twenty-stamp dry-crushing silver mill, as it was intended and expected to do.

And the defendant further alleges that the said machinery and apparatus and parts thereof wore out and became injured by reason of the said improper and unskillful setting and placing, and thus greatly damaged the defendant; and the defendant also, by reason of the failure of the plaintiffs to promptly remedy the said defects, deficiencies, and imperfections in the said machinery and apparatus and in the setting and placing thereof, was compelled to expend large sums of money in the employment of skilled and expert persons to ascertain and locate the particular defects, deficiencies, and imperfections, and to lay out large sums of money for labor and material in remedying the same when ascertained, as well as in repairs made necessary by the more rapid wearing out of parts of said machinery and apparatus because of said improper and unskillful setting and placing of the same and construction thereof.

And defendant further alleges that certain corrugated iron roofing and certain fire-brick supplied by the plaintiffs under the said agreements, and in connection with the erection of said mill and
79 the setting up and placing of the said machinery and apparatus, and shipped by the plaintiffs from Chicago, in the State of Illinois, to the place where said mill was being erected at great expense to the plaintiff for transportation, were of very inferior quality and not merchantable, and not fit for the purposes for which they were intended, and a large portion thereof was wholly worthless, the price of which amounted to about eight hundred and fifty dollars and was included in the original promises described in the first defense set out in this answer, given at the request of the plaintiffs, and the amount paid by the defendant for the transporta-

tion of such worthless material from Chicago to said mill was about three hundred dollars.

And the defendant further shows that the parts and portions of said mill, machinery, apparatus, and connections hereinbefore referred to and alleged to be defective, deficient, and imperfect, or worthless, or not properly set up and placed, or improperly constructed, or constructed with poor material are enumerated as follows, to wit:

1. The conveyor and the elevator intended to transfer the pulverized ore from the stamp to the roasting cylinder were of less dimensions than provided for by the agreements and not of sufficient capacity to transfer the ore stamped as fast as stamped.

2. The salt-feeder was not fit for the purpose for which it was intended, and worthless.

3. The automatic feeder was not fit for the purpose for which it was intended, and not properly constructed, and was of little or no value.

80 4. The brick furnaces were not properly constructed, and constructed of poor brick and other unfit material.

5. The roof of the furnace connected with the drying cylinder was not properly constructed.

6. The said roasting cylinder and the machinery and apparatus connected with its movement and operation was not properly set up and placed.

8. The water tank was improperly constructed and of poor material and unfit for the purpose for which it was intended, and worthless.

And the defendant avers that its damages by reason of all the premises amount to twenty-five thousand dollars, for which the defendant demands judgment against the plaintiffs, besides its costs.

Dated May 2, 1884.

(S'g'd) BENTLEY & VAILE,
Defendant's Attorneys.

(Endorsed:) 1102. Law. In U. S. circuit court, district of Colorado. David R. Fraser *et al. vs.* The New York and Colorado Mining Syndicate and Company. Amended answer. Filed May 10, 1884. (S'g'd) Edward F. Bishop, clerk. Bentley & Vaile, attorneys for def't.

And afterwards and on, to wit, the 11th day of July, A. D. 1884, the same being one of the regular juridical days of the May
81 term, A. D. 1884, of said court—present, the Honorable Moses Hallett, district judge—the following proceeding, *inter alia*, was had and entered of record in said court and in said cause, to wit:

Order. Leave to Amend Complaint.

DAVID R. FRASER *et al.*
vs.
THE NEW YORK AND COLORADO MINING SYNDICATE AND COMPANY. } 1102.

Action on a promissory note and an account.

At this day come the said plaintiffs, by Amos Steck, Esq., their attorney, and the said defendant, by J. A. Bentley, Esq., its attorney, also comes.

And thereupon, on motion of the said plaintiffs and for good and sufficient reasons to the court appearing, it is ordered by the court that the said plaintiffs have leave to amend their complaint herein by adding thereto, as additional plaintiffs therein, the names of Norman D. Fraser and William J. Chalmers; and the said amended complaint is accordingly now filed.

And thereupon and on the same day, to wit, the 11th day of July, A. D. 1884, came again the said plaintiffs, by their attorneys aforesaid, and filed in said court and in said cause their amendment to the consolidated complaint heretofore filed herein; and the said amendment to complaint is in words and figures as follows, to wit:

82 *Amendment to Consolidated Complaint.*

UNITED STATES OF AMERICA, *District of Colorado,* } *ss:*

In the Circuit Court of the United States for the District of Colorado.

DAVID R. FRASER & THOMAS CHALMERS, Copartners, &c., Pl'ffs,
vs.
THE NEW YORK & COLORADO MINING SYNDICATE & COMPANY, Def't.

Now come the plaintiffs, by Teller & Orahood & Amos Steck, their attorneys, and move the court to amend the complaint of plaintiffs by inserting or adding the names of Norman D. Fraser & William J. Chalmers as plaintiffs in the above-entitled action; which motion was allowed by the court, and the names of said Norman D. Fraser & William J. Chalmers were duly added as plaintiffs and the said complaint amended accordingly.

July 11, '84.

(S'g'd) TELLER & ORAHOOD,
AMOS STECK,
Att'ys for Pl'ffs.

(Endorsed:) 1102. David R. Fraser *et al.*, pl'ffs, *vs.* The New York & Colorado Mining Syndicate & Company. Amendment to consolidated complaint. Filed Jul- 11, 1884. (S'g'd) Edward F. Bishop, clerk. Teller & Orahood & Amos Steck, att'ys for pl'ffs.

83 And afterwards and on the same day, to wit, the 11th day of July, A. D. 1884, the following further proceeding was had and entered of record in said court and in said cause, to wit:

Order. Jury Trial, &c.

DAVID R. FRASER *et al.*
vs.
THE NEW YORK AND COLORADO MINING SYNDICATE AND COMPANY. } 1102.

Action on a promissory note and on an account.

At this day come the said plaintiffs, by Willard Teller, Esq., their attorney, and the said defendant, by J. A. Bentley, Esq., its attorney, also comes.

And thereupon comes a jury, to wit: 1, Charles R. Fiske; 2, Benair C. Sawyer; 3, Ebenezer B. Headley; 4, F. C. Avery; 5, Edward W. Morse; 6, Frederick A. Woodson; 7, Thomas Woodward; 8, A. Jacobs; 9, F. A. O'Mara; 10, C. V. Howard; 11, Louis A. Curtice; 12, John Maginnis, twelve good and lawful men, and they are duly selected and tried, impanelled, and sworn to well and truly try the issues herein joined and a true verdict render according to the evidence.

And thereupon comes the evidence, the hearing of which is continued to the hour of adjournment.

And the said jurors, being now each duly cautioned by the court not to converse among themselves or with others touching this
84 cause or the matters at issue herein or the evidence heard or any part thereof, nor to listen to such conversation of others, are permitted to separate, to meet the court at its next incoming.

And afterwards and on, to wit, the 12th day of July, A. D. 1884, the same being one of the regular juridical days of the May term, A. D. 1884, of said court—present, the Honorable Moses Hallett, district judge—the following proceeding was had and entered of record in said court and in said cause, to wit:

Order. Trial Continued.

DAVID R. FRASER *et al.*
vs.
THE NEW YORK AND COLORADO MINING SYNDICATE AND COMPANY. } 1102.

Action on a promissory note and an account.

At this day come again the said parties, by their attorneys, respectively, and the said jurors being now all here present and in the jury-box, the hearing of the evidence herein is resumed and continued to the hour of adjournment.

And the said jurors, being now each duly cautioned by the court

not to converse among themselves or with others touching this cause or the matters at issue herein or the evidence heard or any part thereof, nor to listen to such conversation of others, are permitted to separate, to meet the court at its next incoming.

85 And afterwards and on, to wit, the 14th day of July, A. D. 1884, the same being one of the regular juridical days of the May term, A. D. 1884, of said court—present, the Honorable Moses Hallett, district judge—the following proceeding was had and entered of record in said court and in said cause, to wit:

Order. Trial. Finding for Plaintiffs.

DAVID R. FRASER *et al.*
vs.
THE NEW YORK AND COLORADO MINING SYNDICATE AND COMPANY. } 1102.

Action on promissory notes and an account.

At this day come again the said parties, by their attorneys, respectively, and the said jurors being now all here present and in the jury-box, the trial herein is resumed.

And the said jurors, having heard the evidence produced herein and the instructions of the court, retire to their room, under charge of a sworn bailiff, to consider of their verdict.

And afterwards and on this same day come again the said jurors and on their oaths do say they find for the plaintiffs in the sum of ten thousand five hundred dollars ($10,500.00).

And afterwards and on, to wit, the 25th day of July, A. D. 1884, the same being one of the regular juridical days of the May term, A. D. 1884, of said court—present, the Honorable Moses Hallett, district judge—the following proceeding was had and entered of record in said court and in said cause, to wit:

86 *Order. Motion for New Trial Denied.*

DAVID R. FRASER, THOMAS CHALMERS, WILLIAM J. CHALMERS, and NORMAN D. FRASER, Copartners, Doing Business under the Firm Name and Style of Fraser and Chalmers,
vs.
THE NEW YORK AND COLORADO MINING SYNDICATE AND COMPANY. } 1102.

Action on a promissory note and an account.

At this day come the said plaintiffs, by Willard Teller, Esq., their attorney, and the said defendant, by J. F. Vaile, Esq., its attorney, also comes.

And the motion of the said defendant for a new trial of the issues herein joined coming on now to be heard is argued by counsel; and the court being now sufficiently advised in the premises, it is ordered

by the court, for good and sufficient reasons to the court appearing, that the said motion be overruled.

And it now appearing to the court that, by the order of the court herein, the said defendant hath paid to the said plaintiffs, to abide the judgment herein, and on the 3rd day of February, A. D. 1884, the sum of three thousand dollars ($3,000.00).

Therefore it is ordered by the court, on motion of the said plaintiffs, that judgment be entered herein upon the verdict of the jury for the sum of ten thou-
87 sand five hundred dollars $10,500 00

Less the said sum of $3,000.00, paid as aforesaid, together with *$3,000.00* interest from the day of payment thereof to the 14th inst., at 6 % per annum, to-wit, $*60*.00 ..... 3,066 00

That is to say, for the sum of seven thousand four hundred and thirty-four dollars $7,434 00

and the said plaintiffs' costs, to be taxed.

And, upon motion of the said defendant, it is ordered by the court that day until thirty (30) days from this day be allowed unto the said defendant in which to file herein its bill of the exceptions reserved by it upon the trial of the issues herein joined.

And thereupon and on the same day, to wit, the 25th day of July, A. D. 1884, judgment was duly entered against the said defendant in the judgment book of said court, in pursuance of the statutes and rules of court; and the said judgment is in words and figures as follows, to wit:

Judgment.

DAVID R. FRASER, THOMAS CHALMERS, WILLIAM J. CHALMERS, and NORMAN D. FRASER, Copartners, Trading and Doing Business under the Firm Name and Style of Fraser & Chalmers,

vs.

THE NEW YORK AND COLORADO MINING SYNDICATE AND COMPANY. } 1102.

Action on a promissory note and an account.

88 On this 25th day of July, A. D. 1884, the same being one of the regular juridical days of the May term, A. D. 1884, of said court, there being present the Honorable Moses Hallett, district judge—

It is considered by the court that the said plaintiffs do have and recover of and from the said defendant seven thousand four hundred and thirty-four dollars ($7,434.00), their damages by occasion of the premises in their complaint mentioned, in form aforesaid assessed, and their costs by them in this behalf laid out and expended, to be taxed, and have execution therefor.

And afterwards and on, to wit, the 23rd day of August, A. D. 1884, came again the said defendant, by Messrs. Bentley & Vaile, its attorneys, and filed in said court and in said cause its bill of the exceptions reserved by it upon the trial of the issues herein; and the said bill of exceptions is in words and figures as follows, to wit:

Bill of Exceptions.

UNITED STATES OF AMERICA, } ss:
District of Colorado, }

In the Circuit Court.

DAVID R. FRASER, THOMAS M. CHALMERS, NORMAN D. FRASER, and WILLIAM J. CHALMERS, Copartners, as Fraser & Chalmers, Plaintiffs,

89 *vs.*

THE NEW YORK AND COLORADO MINING SYNDICATE AND COMPANY, Defendant.

Be it remembered that on the trial of the above-entitled cause the plaintiffs, to maintain and prove the issues on their part, introduced as a witness one WILLIAM J. CHALMERS, who, being duly sworn, testified as to the execution by the defendant of the promissory notes sued on, and further testified, in answer to questions asked, as follows:

Q. Has the firm (meaning the plaintiffs) now any account, not including these notes, against the defendant?

A. Yes, sir.

Q. (Paper shown witness.) Look at that account and see whether this is a copy of the account.

A. Yes, sir.

Q. State whether the articles mentioned in that account were ordered by the defendant. And, if so, when?

To which question counsel for defendant objected on the ground that the items could not be proved wholesale by the list, but the objection was overruled by the court; to which ruling of the court defendant then and there excepted.

And thereupon the witness proceeded.

A. They were ordered at various times, by letter and verbally, between the 25th day of July and December 30, 1882.

The witness then proceeded to read the paper handed him, showing an itemized statement of account aggregating $2,531.78.

90 Said witness further testified as follows:

Q. You may reckon the interest (on said account) from January 1, 1883, up to this time, at six per cent.

A. $233.59.

To which question and answer defendant objected on the ground that it was immaterial, but the objection was overruled by the court; to which ruling defendant then and there excepted.

And in the progress of said trial the defendant-, to maintain the issues on their part, introduced as a witness one GEORGE K. SABIN, who, being duly sworn, testified that his occupation for the past twenty years had been mining, and that he was in the employ of the defendant- as superintendent at the time of the erection of the mill in controversy, and so continued until the mill was shut down. He further testified, *inter alia*, as follows:

"I have been engaged in mining twenty years and am acquainted with stamp mills, quartz mills, and mining machinery."

Q. "What was the fair rental value of this mill and its attachments? And in giving your answer you can give it at so much per month, year, or such other division of time as may be most convenient and intelligible."

To this question counsel for plaintiffs objected on the ground that it was not the proper measure of damages, and further, because the witness had not shown himself competent to speak on the subject; and the objection was sustained on the last-mentioned ground by the court; to which ruling and decision of the court defendant then and there excepted.

91 Q. "Have you been engaged about mills enough to know what work they perform—what they can do—what they can earn?"

A. "I have of gold mills. This was the first silver mill I was connected with."

Q. "Do you know their cost?"

A. "I think I do know something of their cost; have been engaged in construction. The cost of this mill was about $75,000.00, inclusive of the machinery and everything connected with it."

Q. "What was the fair rental value per month of this mill and its attachments?"

To this question counsel for plaintiffs objected on the ground that the witness had not shown himself competent, and the objection was sustained by the court; to which ruling the defendant then and there excepted.

The said witness further testified that the defendant company operated a mine near this mill from which the ore was procured to run through said mill.

Q. "Was there sufficient quantity of ore in this mine accessible to employ the mill and keep it running to its full capacity?"

A. "Yes, sir."

Q. "How long have you been mining and been acquainted with ores?"

A. "I have been mining since 1860."

Q. "Have you, during the same time, been acquainted with the milling of ores?"

A. "Yes, sir. This mill at Columbus was the first silver mill I had been with; had been engaged in gold ores."

Q. "You have been acquainted to some extent with silver ores and silver mills?"

A. "Yes, sir."

92 Q. What was the value of these ores delivered at the Columbus mill in this raw state, as taken from the mine ready to be melted; what was the value for milling purposes?

To this question counsel for plaintiffs objected, and the objection was sustained by the court; to which ruling the defendant then and there at the time duly excepted.

By the COURT: "I do not think the rental value of the mill would be proved by showing the value of the ore."

Q. "Do you know of any silver mills of the same kind in that neighborhood?"

A. "No, sir; there are none in that immediate neighborhood."

Q. At what distance away do you know of any?

A. "Up in Leadville. I do not know of any in operation now. There was one in operation the other side of Leadville a year ago, in Soda creek."

Q. Do you know of any silver mills being rented at Leadville?

A. No, sir; I do not know of any being rented in the State anywhere.

And the defendant in the progress of said trial also introduced as a witness A. E. SMITH, who, being duly sworn, testified that for twelve years past he had been running stamp-mill works and quartz mills and manufacturing assayers' supplies; that he had been in the employ of defendant, as foreman of the mill at Columbus, Colorado, from March, 1882, & December, 1883, and that he had aided

93 in the erection of the mill in controversy. He also testified, in answer to questions as to the capacity and work of said mill, as follows, to wit:

A. "In the month of September (1882) we milled 721 cars of ore which averaged 1,200 pounds each, which makes an average of 13 tons a day. In October we run 977 cars, which averaged 1,200 pounds each, averaging 19 tons a day and a fraction, and in November 1,117 cars, 22 tons per day; in December 902 cars, 18 tons a day."

Q. "Can you state the amount of ore that was milled during the months of March and April following?"

To this question counsel for plaintiffs objected on the ground that it was immaterial, irrelevant, and incompetent, and the objection was sustained by the court; to which ruling and decision defendant then and there at the time excepted.

Q. "Can you give the amount of ore that was milled during the month of January?"

To this question counsel for plaintiffs objected on the ground last above given, and the court sustained the objection; to which ruling and decision of the court the defendant then and there excepted.

Q. "What was the capacity of that mill per day upon that ore from Sept. 4 to Dec. 31, 1882, but for the defects in the cylinder and conveyors which have been described?

A. "We run 30 tons a day afterward.

Q. "With the mill in good working order, what would have been its capacity?

A. "30 tons per day.

94 Q. "What was the worth of milling that ore per ton?"

Plaintiffs' counsel objected to this question on the ground that it was immaterial and not the proper measure of damages.

By the COURT (to the witness): "What was the cost?

A. "About six dollars per ton and a few cents."

The witness further testified as to the expense of operating the mill, the number and wages of the men, and cost of fuel; the number of days the mill was idle, wholly or partially, by reason of the defects complained of, the saving of wages by diminution of the working force when the mill was idle, and the extent to which employees were turned to other labor while the mill was not running, and was then further interrogated by counsel for defendant.

Q. "What wages would you have been compelled to pay to other men had you employed them to do that same work for which you paid these men, during the time the mill was stopped?"

To this question counsel for plaintiffs objected, and the objection was sustained by the court; to which ruling and decision of the court defendant then and there excepted.

And in the progress of said trial the defendant also introduced as a witness to sustain the issues on his part one H. A. HURLBUT, who, being duly sworn, testified that he was a managing director of the defendant company in 1881 and 1882, and also testified, among other things, that one Riatti was a mining expert and metal-

95 lurgist, upon whom the defendant relied as to the best method of extracting silver from the ore; that upon his recommendation the white roasting furnace had been selected, and that defendant had employed the plaintiffs as machinists to erect it; that defendant relied on said Riotti as to the proper process for the separation of the ores, but relied solely on the plaintiffs for the mechanical construction and erection of the machinery; and further, in answer to questions, testified:

Q. "What was Riotti directed or authorized to do about the specifications?

A. "He was authorized to give the draughtsman the incline of the hill—the room there was into the base of the retaining wall—the relative positions of where the stamps and the roasting cylinder were to be and where the furnace should be placed in position, and to give relative positions and distances.

Q. "Had he anything to do with the mechanical construction of the mill?

A. "No, sir."

And further in the progress of said trial the plaintiffs recalled in rebuttal one of the plaintiffs, to wit, the witness William J. Chalmers, who further testified: "Hurlbut said that Riotti had been engaged by the New York parties as consulting engineer, as they wanted to hold some one responsible for the working of the ores. We were notified to comply with Riotti's directions. In looking over the original plan of the furnace the conveyors were shown in the plan, but Riotti said he preferred"——

96 Objections by defendant's counsel, who asked and obtained leave of the court to first cross-examine the witness as to circumstances of the conversation.

Q. "Who was the conversation with?
A. "I was present during most of the time.
Q. "Who was with you?
A. "It was between Riotti, Fraser, and myself and our draughtsman."

Defendant here objected to the introduction of evidence as to what was said by Riotti, on the ground that Riotti was not shown to have authority to bind the company, but the objection was overruled; to which ruling defendant at the time duly excepted.

The witness then proceeded:

Q. "Go on.
A. "Riotti said he desired us to follow the drawing in making the furnace. This drawing showed the conveyors as afterwards put in the mill. We changed the original specifications; they were never accepted by the company, they refusing to accept them. We had the acceptance of Riotti of the plans."

And this was all the evidence affecting the matters of defendant's exceptions herein.

And be it further remembered that on the trial of said cause, after the conclusion of the evidence-in-chief on the part of the plaintiffs, the plaintiffs asked leave of the court to amend the complaint by adding the names of Norman D. Fraser and William J. Chalmers as parties plaintiff therein; to which defendant objected, on
97 the ground that at that stage of said cause such amendment would be irregular and improper, but that objection was overruled by the court and the said amendment allowed; to which ruling and decision of the court the defendant then and there excepted.

And be it further remembered that at the conclusion of the testimony in said cause the defendant requested the court in writing to give to the jury the following instructions on the right of defendant to recoup damages in said cause.

1. "If the plaintiffs undertook to supply and put up, so it should be complete and in good running order, the mill or machinery mentioned in defendant's second defence, and entered upon the performance of such agreement, and if the machinery supplied proved de-

fective and mechanically inadequate for the purpose intended, or was not complete nor executed in proper manner, or if the work was unskillfully performed, then in this action the defendant would be entitled to recover from the plaintiffs the damages actually sustained by reason of such failure of the plaintiffs to perform their agreement; and, in measuring the damages, if any, sustained by defendant, you may consider—

"1. The loss of the use of the mill and machinery, either wholly or partially, resulting from such defects and unskillful performance.

"2. Any sums paid out by defendant in remedying defects and making repairs in such mill and machinery in consequence of such defects."

98 Which said instructions the court refused to give, and to such decision and refusal the defendant then and there at the time duly excepted.

2. "In estimating defendant's damages in consequence of plaintiffs' breach of their undertaking, if you find there was such a breach, you may also consider the necessary and immediate loss of profits incurred by the defendant during the period when the said defendant was, by reason of the alleged defects, deprived of the use of such mill and machinery."

Which said instructions the court refused to give, and to such decision and refusal the defendant then and there at the time duly excepted.

And be it further remembered that after the conclusion of the evidence and the argument of counsel in said cause the court, of its own motion, instructed the jury as to the law of said cause, and, on the question of the measure of defendant's damages, the court instructed the jury in the following words, to wit:

"If you find the defendant is entitled to deduct its damages, resulting from delay in the operation of the mill, from the amount of the plaintiffs' claim, the question then comes, how much? and upon that, as to the delay in operating the mill, whether it proceeded from the conveyors, from the cylinder, or from both, it was undoubtedly entitled to the rental value of the mill, which was not shown.

99 It does not even appear whether there was any rental value for such a mill as that. Undoubtedly some kinds of mills at Leadville, and perhaps at other points in the State, have a rental value, but it does not appear that there is any such smelting furnace as this at Leadville, and no such mill is known to the court. I think stamp mills have a rental value at Central City. We used to hear something of them some years ago, but I do not remember ever to have heard of this particular kind of a mill, with this sort of a cylinder attached to it, in this State; and whether this mill has a rental value we are not able to say. We are not to assume that it has. Counsel for defendant says that the capacity of the mill was thirty tons a day. At the time that evidence was offered it was received to prove the rental value of the mill; that might be the first thing necessary to know about any mill before determining its value for rental.

"He proved in addition to that that the cost of treating ore in the mill was six dollars a ton; and upon that he assumes that defendant is entitled to recover the cost of treating ore of the amount or quantity that it was unable to treat by reason of the failure of the mill to operate; but he is entirely mistaken in the rule. If you say the mill has a capacity of thirty tons a day and you can recover at that rate, it would give one hundred and eighty dollars a day as the rental value of the mill, which, of course, would be enormous. It is quite obvious that this is not a guide or a matter upon which you can make an estimate of the rental value of the mill. The rental value would be, if it can be shown at all, what anybody would be willing to pay for such a mill to use in the treatment of their own ore or other ore which should be brought to him for treatment; of that we have no evidence at all.

100 "In the absence of all evidence as to the rental value we are unable to assume that there is any evidence of value or that any can be given, and you are at liberty to allow interest on the investment. It was shown in evidence that the mill cost $75,000.

"I suppose there is no reason to doubt that statement. So if you find that the defendant is entitled to deduct damages for delay in running the mill, you can take the time shown before you. I do not say how many days were proven, but you can deduct the time and allow interest on the investment, $75,000, at ten per cent. per annum; that is the best that can be done on this evidence."

To the giving of which instructions and to each several propositions therein contained defendant at the time duly excepted.

And the court further, as to the matter of damages, instructed the jury in the following words, to wit:

"There is something more in the way of damages than the rental value. There were men employed in the mill whose time was lost while the mill was idle. There was some evidence to the effect that these men were employed some part of the time, I believe not all of it, in other work. No deduction can be made for the time they were so employed, but when there was a loss of time of the men and the defendant was paying them wages, that may be added as an element of damages, as in the case of Smith, the foreman. I believe his wages went on all the time, whether the mill stopped or not, and perhaps there were some others in the same situation."

101 To the giving of which instructions and to each several proposition therein contained defendant at the time duly excepted.

And the court further, as to the matter of damages, instructed the jury as follows, to wit:

"It is said further that in consequence of the misplacement of the cylinder it was greatly injured; the wheels on which it rested, cutting through the surface of the bands, wore them out so that new bands became necessary as the work went on; sometimes before they would otherwise have been required.

"The defendant thinks, if you find in his favor, that he ought to

be allowed the cost of the new bands. It is not exactly that; it is the injury to the old ones. I believe it was said the first bands ought to have lasted one year, if fairly used. They were so damaged that they had to be taken off in much less than a year. I do not think the cost of the first bands was shown at all. Probably only the cost of the cylinder with the bands on it. The new bands differed in some respects from the old ones. I do not know how you can get on with that, but you can make the best you can of it. You cannot allow the full amount of the cost of the new bands, the $1,400, paid, because you have no evidence the bands were worth so much."

To the giving of which instructions and to each several proposition therein contained defendant at the time duly excepted.

And these were all of the instructions of the court affecting the rule of damages applicable to said cause.

And, inasmuch as the matters herein recited do not suffi-
102 ently appear of record in said cause, the defendant prays that this its bill of exceptions may be signed, sealed, and made a part of the record herein, which is now done.

(S'g'd) MOSES HALLETT, [SEAL.]
Dist. Judge.

I consent that the foregoing paper, purporting to be a bill of exceptions, may be tendered to the judge of the court on Monday, the 26th of August, 1884, & signed by him then or afterwards, if no exceptions be filed thereto by or on said 26th Aug't.

(S'g'd) AMOS STECK,
Att'y for Pl'ffs, Fraser et al.

(Endorsed:) 1102. U. S. circuit court. David R. Fraser *et. al. v.* The New York and Colorado Mining Syndicate and Company. Defendant's bill of exceptions. Filed Aug. 23, 1884. (S'g'd) Edward F. Bishop, clerk.

And afterwards and on, to wit, the 15th day of August, A. D. 1885, came again the said defendant, by J. A. Bentley, Esq., its attorney, and filed in said court and in said cause its bond, and sued out of said court a writ of error and citation to the Supreme Court of the United States; and the said bond is in words and figures as follows, to wit:

Bond.

UNITED STATES OF AMERICA, *District of Colorado:*

Know all men by these presents that The New York and Colo-
103 rado Mining Syndicate and Company, as principal, and ——— ———, as sureties, are held and firmly bound unto David R. Fraser, Thomas Chalmers, Norman D. Fraser, and William J. Chalmers in the full and just sum of one thousand dollars, to be paid to the said David R. Fraser, Thomas Chalmers, Norman D. Fraser, and William J. Chalmers; to which payment, well and truly to be made, we

bind ourselves, our heirs, executors, and administrators, jointly and severally, firmly by these presents.

Sealed with our seals and dated this 2nd day of February, in the year of our Lord one thousand eight hundred and eighty-five.

Whereas lately, at the May term, A. D. 1884, of the circuit court of the United States for the district of Colorado, in a suit pending in said court between David R. Fraser, Thomas Chalmers, Norman D. Fraser, and William J. Chalmers, copartners, trading and doing business under the firm name and style of Fraser & Chalmers, plaintiffs, and The New York and Colorado Mining Syndicate and Company, defendant, judgment was rendered against the said The New York and Colorado Mining Syndicate and Company for seven thousand four hundred and thirty-four (7,434) dollars' damages and one hundred and forty dollars and fourteen (140.14) cents' costs, and the said defendant is about to obtain a writ of error to reverse the judgment of said court, and a citation directed to the said David R. Fraser, Thomas Chalmers, Norman D. Fraser, and William J. Chalmers, citing and admonishing them to be and appear at a term of the Supreme Court of the United States to be held at Washington on the second Monday of October next:

Now, the condition of the above obligation is such that if the said The New York and Colorado Mining Syndicate and
104 Company shall obtain said writ of error and shall prosecute said writ of error to effect and answer all costs if it fails to make good its plea, then the above obligation to be void; else to remain in full force and virtue.

[Seal N. Y. & Colo. Min. Syn. & Co.]

(S'g'd) THE NEW YORK AND COLORADO MINING SYNDICATE AND COMPANY,

By JAMES C. SPENCER, *President.* [SEAL.]
H. I. JEWETT. [SEAL.]
R. C. VILAS. [SEAL.]
JAMES C. SPENCER. [SEAL.]

Approved:
(S'g'd) MOSES HALLETT, *Judge.*

Aug. 15, 1885.

Justification.

THE UNITED STATES OF AMERICA, *Southern District of New York,* } ss:

Hugh I. Jewett, Royal C. Vilas, and James C. Spencer, sureties on the within bond, being each first duly sworn, deposes and saith that he is worth in real and personal property the sum below set opposite his name—that is to say:

As to Hugh I. Jewett.....two thousand dollars;
As to Royal C. Vilas.....two thousand dollars;
As to James C. Spencer.....two thousand dollars,

over and above all his just debts and liabilities and in property subject to levy and sale upon execution.

(S'g'd) H. I. JEWETT.
ROYAL C. VILAS.
JAMES C. SPENCER.

105 Subscribed and sworn to before me, at New York, this 11th day of February, A. D. 1885.

[SEAL.] (S'g'd) SAM. G. HYMAN, *Clerk*,
By SAM M. HITCHCOCK,
Deputy Clerk.

I, Addison Brown, judge of the United States district court for the southern district of New York, hereby certify the foregoing bond to be a good and sufficient bond, acceptable in this district, for the prosecution of a writ of error and to answer for all damages & costs.

Dated New York, February 11th, 1885.

(S'g'd) ADDISON BROWN.

(Endorsed:) Gen. No. 1102. Circuit court of the United States, district of Colorado. David R. Fraser, Thomas Chalmers, Norman D. Fraser, and William J. Chalmers, copartners, etc., *vs.* The New York and Colorado Mining Syndicate & Company. Bond on writ of error, $1,000. Filed this 15th day of Aug't, A. D. 1885. (S'g'd) Edward F. Bishop, clerk.

Writ of Error.

106 THE UNITED STATES OF AMERICA.

UNITED STATES OF AMERICA, } *ss:*
District of Colorado, }

The President of the United States to the judge of the circuit court of the United States for the district of Colorado, Greeting:

Because in the record and proceedings, as also in the rendition of the judgment of a plea which is in the said circuit court, between David R. Fraser, Thomas Chalmers, William J. Chalmers, and Norman D. Fraser and The New York and Colorado Mining Syndicate and Company, a manifest error hath happened, to the great damage of the said The New York and Colorado Mining Syndicate and Company, as by its complaint appears, we, being willing that error, if any hath been, should be duly corrected and full and speedy justice done to the parties aforesaid in this behalf, do command you, if judgment be therein given, that then, under your seal, distinctly and openly, you send the record and proceedings aforesaid, with all things concerning the same, to the Supreme Court of the United States, together with this writ, so that you have the same at Washington on the second Monday of October next, in the said Supreme Court to be then and there held, that, the record and proceedings aforesaid being inspected, the said Supreme Court may cause fur-

ther to be done therein to correct that error what of right and according to the law and custom of the United States should be done.

Witness the Hon. Morrison R. Waite, Chief Justice of the Supreme Court of the United States, this 15th day of August, in the year of our Lord one thousand eight hundred and eighty-five, and of the Independence of the United States the 110th year.

[Seal of the United States Circuit Court, District of Colorado.]

EDWARD F. BISHOP, *Clerk.*

Allowed by—

MOSES HALLETT, *Judge.*

107 [Endorsed:] Gen. No. 1102. Circuit court of the United States, district of Colorado. The New York & Colorado Mining Syndicate and Company, plaintiff in error, *vs.* David R. Fraser, Thomas Chalmers, William J. Chalmers, & Norman D. Fraser. Writ of error to the circuit court U. S., district of Colorado. Filed in circuit court of the U. S. this 15 day of Aug't, A. D. 1885. Edward F. Bishop, clerk. J. A. Bentley, attorney for plaintiff in error.

Return.

THE UNITED STATES OF AMERICA, *District of Colorado,* } *ss:*

In obedience to the command of the within writ I herewith transmit to the honorable Supreme Court of the United States, at Washington, D. C., a duly certified transcript of the record and proceedings in the within-entitled case, together with all things concerning the same.

Witness my hand and the seal of said circuit court, at Denver, in said district, this 15th day of September, A. D. 1885.

[Seal of the United States Circuit Court, District of Colorado.]

EDWARD F. BISHOP, *Clerk,*
By F. W. TUPPER, *Deputy Clerk.*

108 *Citation.*

109 THE UNITED STATES OF AMERICA, *District of Colorado:*

The United States of America to David R. Fraser, Thomas Chalmers, William J. Chalmers, and Norman D. Fraser, Greeting:

You are hereby cited and admonished to be and appear at a term of the Supreme Court of the United States to be holden at Washington on the second Monday of October next, pursuant to a writ of error filed in the clerk's office of the circuit court of the United States for the district of Colorado, wherein The New York and Colorado Mining Syndicate and Company is plaintiff in error and you are defendants in error, to show cause, if any there be, why the judg-

ment rendered against the said plaintiff in error, as in the said writ of error mentioned, should not be corrected and why speedy justice should not be done to the parties in that behalf.

Witness the Honorable Moses Hallett, judge of the circuit court of the United States for the district of Colorado, this 15th day of August, in the year of our Lord one thousand eight hundred and eighty-five.

MOSES HALLETT, *Judge.*

110 [Endorsed:] Gen. No. 1102. Circuit court of the United States, district of Colorado. The New York and Colorado Mining Syndicate and Company, plaintiff in error, *vs.* David R. Fraser, Thomas Chalmers, William J. Chalmers, and Norman D. Fraser, defendant- in error. Citation. Filed in circuit court of the U. S. this 21st day of Aug't, A. D. 1885. Edward F. Bishop, clerk. J. A. Bentley, attorney for plaintiff in error.

Proof of Service.

THE UNITED STATES OF AMERICA, *District of Colorado,* } *ss:*

On this 21st day of August, A. D. 1885, personally appeared J. A. Bentley before me, the subscriber, a clerk of the circuit court of the United States for the district of Colorado, and makes oath that he delivered a true copy of the within citation to Willard Teller, Esquire, one of the attorneys for the plaintiffs in said circuit court and who are the defendants in error described in the within citation, at his office in Denver, Colo., on the 15th day of August, instant.

J. A. BENTLEY.

Sworn to and subscribed before me this 21st day of August, A. D. 1885.

[Seal United States Circuit Court, District of Colorado.]

EDWARD F. BISHOP, *Clerk.*

111 UNITED STATES OF AMERICA, *District of Colorado,* } *ss:*

I, Edward F. Bishop, clerk of the circuit court of the United States for the district of Colorado, sitting at Denver, do hereby certify the above and foregoing to be a true, perfect, and complete transcript and copy of the record and proceedings heretofore had and entered of record in said court, and in a certain cause lately in said court pending, wherein David R. Fraser *et al.* were plaintiffs and The New York and Colorado Mining Syndicate and Company was defendant, as fully and completely as the same still remain on file and of record in my office.

In testimony to the above I do hereunto sign my name and affix

the seal of said court, at Denver, in said district, this 15th day of September, A. D. 1885.

[Seal United States Circuit Court, District of Colorado.]

EDWARD F. BISHOP, *Clerk*,
By F. W. TUPPER, *Deputy Clerk*.

Transcript	31 50
Cert'f'e & seal	35
	$31 85

Endorsed on cover: Colorado C. C. U. S. No. 204. The New York & Colorado Mining Syndicate and Company, plaintiff in error, *vs.* David R. Fraser, Thomas Chalmers, William J. Chalmers, and Norman D. Fraser. Filed November 13, 1885.

SUPREME COURT OF THE UNITED STATES.

OCTOBER TERM, 1888. No. 204.

NEW YORK AND COLORADO MINING SYNDICATE AND COMPANY, Plaintiff in Error,
vs.
DAVID R. FRASER, THOMAS CHALMERS, WILLIAM J. CHALMERS, and NORMAN D. FRASER, Defendants in Error.
} Assignment of Error.

Afterwards, to wit, on the second Monday of October term, 1888, before the justices of the said Court, at the Capitol, at Washington, came the said plaintiff in error, by its attorneys, and says that in the record and proceedings aforesaid there is manifest error, in this, to wit: In each and every of the several rulings of the court, to which exceptions were taken and allowed, and in the refusals of the court to admit testimony and to exclude testimony, to which refusals to admit and refusals to exclude due objections were made and exceptions severally taken and allowed, and in the refusals of the court to instruct the jury as prayed for, to which refusals exceptions were severally allowed and taken, and in the instructions which were given by the court to the jury, to which instructions exceptions were likewise taken and allowed, and in other matters and things respecting which exceptions were duly taken and allowed, as the same more fully and at large appear by the bill of all of said exceptions as the same appear of record, there was manifest error; and that by the record aforesaid it appears that judgment aforesaid, in form aforesaid given, was for the plaintiffs, whereas by the law of the land said judgment ought to have been given for the defendant, the said plaintiff in error, against the said defendants in error, and for a large sum as damages. For further assignments of error see specifications on brief.

And the said plaintiff in error prays that the judgment aforesaid, in form aforesaid, for the error aforesaid and other errors in the records and proceedings, as the same appear more fully therein, may be corrected and that done what of right and according to law should be done, and that the corporation, the plaintiff in error, may be restored to those things which have been lost to said plaintiff in error by reason of said judgment, etc.

TREMAIN & TYLER,
Attorneys for Plaintiff in Error.

[Endorsed:] Supreme Court of the United States. October term, 1888. No. 204. New York and Colorado Mining Syndicate and Company, pl'ff in error, *vs.* David R. Fraser, Thomas Chalmers, William J. Chalmers, and Norman D. Fraser, def'ts in error. Copy. Assignment of errors. Tremain & Tyler, att'ys for pl'ff in error, 146 Broadway, New York city.

[Stamped:] Office Supreme Court U. S. Filed Mar. 9, 1889. James H. McKenney, clerk.

FILED.
MAR 11 1889
JAMES H. McKENNEY,
CLERK.

SUPREME COURT OF THE UNITED STATES,

OCTOBER TERM, 1888.

No. 204.

THE NEW YORK AND COLORADO MINING SYNDICATE AND COMPANY,

Plaintiff in Error,

against

DAVID R. FRASER, THOMAS CHALMERS, WILLIAM J. CHALMERS and NORMAN D. FRASER,

Defendants in Error.

BRIEF AND ARGUMENT FOR PLAINTIFF IN ERROR.

HENRY EDWIN TREMAIN,
MASON W. TYLER,
JAMES C. SPENCER,
For Plaintiff in Error.

TREMAIN & TYLER,
146 Broadway, N. Y.

C. G. Burgoyne's Printing Business, 148-150 Centre St., N. Y.

Supreme Court of the United States,

OCTOBER TERM, 1888.

No. 204.

THE NEW YORK AND COLORADO MINING SYNDICATE AND COMPANY.
Plaintiffs in Error,

AGAINST

DAVID R. FRASER, THOMAS CHALMERS, WILLIAM J. CHALMERS and NORMAN D. FRASER,
Defendants in Error.

BRIEF FOR PLAINTIFFS IN ERROR.

Statement.

This writ of error is brought to review a judgment entered upon a verdict for $10,500 in favor of the plaintiffs below (Rec., fol. 85). The issues upon which the action was tried are stated in the plaintiff's "consolidated complaint" (Rec., fols. 27 to 34), the defendants' "amended answer" (Rec., fols. 68 to 81), together with the "answer" before amendment (fols. 36–50) and plaintiff's "replication" (fols. 51 to 60).

These issues, briefly stated, comprise the plaintiff's six alleged causes of action, five of them being upon

defendants' promissory notes given to plaintiff for one thousand dollars ($1,000), fifteen hundred dollars ($1,500), two thousand dollars ($2,000), fifteen hundred dollars ($1,500), and four thousand dollars ($4,000) respectively. Plaintiffs' sixth cause of action was for divers goods, chattels and effects of the alleged value of two thousand five hundred thirty-one and $\frac{78}{100}$ dollars ($2,531.78), claimed to have been sold and delivered by plaintiffs to defendants between July 25th, 1882, and January, 1883.

To these six causes of action, the defense admitted the making of the notes and their non-payment, but denied any liability thereon. As to the plaintiffs' sixth cause of action, the defendant denied that "about July 25th, 1882, or at any other time, the plaintiffs sold and delivered to the defendants the goods and chattels referred to in the sixth cause of action set forth in the complaint, of the value of two thousand five hundred thirty-one and $\frac{78}{100}$ dollars, or of any value whatever" (Rec., fol. 68). The defense then set forth the agreements under which the notes were given, the plaintiffs' failure to fulfill, the damages caused by reason of such non-fulfillment, and a demand for judgment counterclaiming such damages. This is detailed in the record, pages 37 to 44. The plaintiffs' replication takes issue upon these allegations. The issue thus made is important to be stated; so the defendants' claim may be digested from the pleadings, viz.:

Under two several agreements made November, 1881, and in the spring of 1882, relating to the same general matter, plaintiffs had agreed with defendants to supply certain machinery, apparatus and material for a mill for the reduction of silver ores, which were to be properly set up and put in place under the superintendence of one McKay, who was selected for that purpose by the plaintiffs, within a reasonable time, so as to be ready to run and be operated as a "twenty-stamp dry crushing silver mill of full capacity," at the defendants'

mine near Columbus, Colorado; the defendants agreeing to pay for the machinery and apparatus and the expenses for labor and matenial in setting it up, including the superintendence of McKay. About July, 1882, and before the machinery and apparatus had been supplied and put in place, and while plaintiffs "were still engaged upon compliance with said original and supplemental agreement" (Rec., fol. 69), defendants, for plaintiffs' accommodation, furnished them certain promissory notes for balances which plaintiffs claimed would ultimately be due to them upon the performance of their contracts. These notes were payable at future times and were given with the defendants' belief that the plaintiffs would proceed to a proper performance and complete execution of their agreement, and would "make good certain defective material furnished by them, by substituting in place thereof other material not defective or by making allowance therefor upon some subsequent settlement" (Rec., fol. 69). When these notes matured the contracts had not yet been fulfilled, but plaintiffs were striving to fulfill them under said McKay's superintendence, so the notes were renewed from time to time "although ample and reasonable time for the performance of said agreement" had long elapsed. These were the notes described in the first five causes of action stated in the complaint. The defendants then alleged that certain material furnished by the plaintiffs was defective and worthless, the price of which was included in the notes; that parts of the machinery and apparatus furnished were imperfect and defective and not fit for the purposes for which they were purchased, and although set up under the direction of said McKay, selected for that purpose by the plaintiffs, "were improperly and unskillfully set up and placed, and not in a workmanlike manner; and after being set up said mill, machinery and apparatus did not and would not work to operate properly and satisfactorily," whereby

defendants were put to great expense and trouble "for repairs, changes and replacements, and suffered great delay and loss of time in the use of said machinery and apparatus and of the services of the persons" employed to operate the same, and in the waste of fuel, oil, material and otherwise was greatly damaged in a sum largely in excess of the whole amount claimed by plaintiffs in this action (Rec., fol. 70). Furthermore, that a considerable portion of the merchandise alleged in plaintiffs' sixth cause of action consisted of apparatus and material and pieces of machinery supplied under the contracts, the price of which was included in the promissory notes; and still another portion consisted of apparatus, material and pieces of machinery furnished by plaintiffs as a substitute to take the place of defective and imperfect material and apparatus which had theretofore been supplied under the contracts, or to take the place of parts of machinery or apparatus which had been supplied or furnished by plaintiffs, and had been injured, worn out or destroyed by reason of the unskillful and improper placing and setting up of the said machinery as aforesaid, under the direction of plaintiffs' superintendent, McKay; and still another portion was so defective and unfit for the purpose for which they were furnished, as to be worthless, so that the defendants demanded judgment.

As a *second* and separate defense to all of the causes of action mentioned in plaintiffs' complaint, and as a counterclaim the defendants allege that the plaintiffs were manufacturers and dealers holding themselves out as experts and as skilled and competent, particularly in mining machinery, apparatus, material and supplies, including the erection and superintending the setting up of mining machinery and apparatus supplied by them. That in November, 1881, defendants were engaged in working a mine operating with a ten-stamp mill, wet process, to reduce the ore thereof, at Columbus, Colorado, the principal part of the machin-

ery for which had been supplied by plaintiffs; and that defendants had determined to change their method of treating the ores "from the wet process to the dry process, and to add to its machinery the white roasting cylinder and necessary machinery and apparatus." Defendants were ignorant of what was necessary for that purpose, and applied to plaintiffs for skilled and competent persons who would supply the roasting cylinder and machinery suitable for the purposes mentioned, and of sufficient dimensions and capacity to operate as a part of a "twenty-stamp mill." The plaintiffs offered to sell the defendants in November, 1881, and to supply the roasting cylinder, the required machinery and apparatus which the plaintiffs themselves had particularly specified and described. These specifications are detailed on page 40 of the record and comprised in substance a "twenty-stamp dry crushing silver mill of full capacity." It was then understood between the parties that the roasting cylinder, machinery and apparatus should be set up and placed at the mill under the direction of McKay, the plaintiff's expert, and at the defendants' expense. Plaintiffs proceeded to furnish the apparatus, but before it had been established as arranged for, the mill was destroyed by fire, and in March or April, 1882, a supplement agreement, partly written and partly oral, was made (fol. 73) to the effect that plaintiffs should utilize such parts of the machinery and apparatus of the burned mill as could be renovated or re-established, together with what they had agreed to supply, in rebuilding the mill, including engines, stamps and all other machinery and apparatus for "a twenty-stamp dry crushing silver mill of full capacity." Plaintiffs further agreed that the contrivances should be set up under the direction of their superintendent, McKay, and, as alleged, "representing to the defendant that the said mill, machinery and apparatus when erected and set up under the direction and superintendence of said McKay, would be properly

erected, set up and placed, so that the same would run, operate and work properly as a twenty-stamp dry crushing silver mill" (Rec., fol. 74). All this was to be placed on the same site and within a reasonable time after April, 1882, the defendants bearing the expense of the machinery and apparatus so to be supplied, and all labor and additional material necessary for its erection, including the superintendence of McKay, selected by plaintiffs for that purpose.

The defendant further showed that plaintiffs then proceeded to manufacture and supply the machinery and apparatus for the mill, and McKay proceeded to set it in place, the defendant meantime making payments towards the same. Ample and reasonable time for supplying the said machinery and apparatus, and the setting it in place had fully elapsed and *passed by* on or about September 4th, 1882, when the said McKay "informed the defendant that he had concluded the work of erecting said mill and placing all said machinery and apparatus, and that said mill was ready to run and operate, and there and then turned the same over to said defendant as complete, under the said agreement" (Rec., fol. 75). The proper operation of the mill required a considerable number of persons, both skilled and ordinary laborers, as well as a permanent foreman and superintendent; and defendant, relying upon the knowledge and skill of plaintiffs and of their superintendent, McKay, and believing, therefore, that the mill, machinery and apparatus, and its establishment in place, was in accordance with plaintiff's agreement and ready to be run, employed the necessary complement of persons as operators, and commenced the reduction of ores, when it was very soon discovered (Rec., fol. 76) that the mill, machinery, apparatus and connections, as set up by McKay, "did not and would not move, work and operate properly, and notice thereof was immediately given to the plaintiffs." The improper working, as is alleged, was

caused by imperfections, defects and deficiencies "in those portions of the machinery and apparatus" which the plaintiffs had supplied, particularly "for the treatment and reduction of ores and the handling of the same, and by the failure of some parts thereof to correspond in dimensions to the specifications" agreed upon, and "in the unskillful and improper placing" of portions of the machinery, apparatus, and furnaces, arches, roofs and supports, and the use of poor and inferior material furnished by plaintiffs in such constructions; and by reason of deficiencies and imperfections in the machinery and apparatus, and the failure of correspondence in its parts and its unskillful placing, and the improper constructions, as stated, the machinery did not work "as a twenty-stamp dry crushing mill of full capacity;" but, on the other hand, often would not work at all, and at other times was shut down for repairs or replacements or readjustments or to facilitate the remedying of defects, and at other times the affair operated "at a rate greatly below what it should have done and crushed and reduced a much less quantity of the defendant's ores" than it would have crushed and reduced but for the defects alleged, and really much less than a "twenty-stamp dry crushing silver mill" of the same kind of full capacity, "properly constructed, set up and put in place, would have crushed and reduced" (Rec., p. 43). The plaintiffs, it is alleged, failed after notification, for a long time, to remedy the difficulties, "and, in fact, never did completely remedy the same." By reason of the foregoing, the defendant suffered great loss of time and *the use and work of the mill*, and in the labor of the persons permanently employed there, and in their wages, which defendant was obliged to pay and did pay, and while the mill was idle the furnace fires and engines wasted a large amount of fuel and material, the value of which was lost, because the machinery for the treatment and reduction of ore would

not operate, and altogether the use of the mill machinery and apparatus when in actual operation was of much less value to defendant than it would have been had it worked properly at the full capacity of a twenty-stamp dry crushing silver mill, as designed (Rec., fol. 78).

The machinery and apparatus wore out and became injured by reason of its improper placing, and defendant, by reason of the plaintiffs' failure to remedy the defects promptly, expended large sums of money in employing experts to locate the defects and to remedy them when ascertained, and in repairs made necessary by the more rapid wear out of certain parts of the construction occasioned because of its improper and unskillful set-up. Certain corrugated iron roofing and fire brick supplied by plaintiffs under their agreement, and shipped by them from Chicago to Columbus, Colorado, at great expense, proved of " very inferior quality and not merchantable, and not fit for the purposes for which they were intended," and a large portion wholly worthless, the price of which, amounting to $850, was included in the original promissory notes, and the amount paid by the defendant for transportation of such worthless material from Chicago was about $300 (fol. 79).

The parts and portions of the mill, machinery, apparatus and connections above referred to and alleged to be defective, deficient and imperfect or worthless, or not properly set up and placed, or improperly constructed with poor material, are then enumerated, and are in brief: The conveyor, the elevator, the salt feeder, the automatic feeder, the brick furnaces, the roof of the furnace connected with the drying cylinder, the roasting cylinder and the machinery and apparatus connected with its movement and operation, the water tank (fol. 80).

The damages claimed by the defendant by reason of the foregoing premises are $25,000. The case is, there-

fore, one of set-off, recoupment and counterclaim. The amended answer, as above indicated, which was made by leave of the Court, is further explained by the original answer to the consolidated complaint found in the record at folio 36, the replication to which applies to this amended answer. The plaintiffs' replication is substantially a general denial of the defendants' allegations, and will be found at record, folio 51. Upon these issues the trial was had. It is proper to add that the issues thus represented are the result, as shown by the record of the consolidation of the several suits brought upon the several causes of action separately stated in the consolidated complaint, the pleadings having been reshaped as the necessary result of the consolidation.

Upon these issues the claim of the plaintiffs for a verdict of $12,531.78 resulted in a verdict for the sum of $10,500, upon which verdict the judgment was based (Rec., fol. 87).

This result awarded the defendant damages limited according to the rules laid down by the Court, and effectually defeated defendants' recovery of damages which it claimed the right to recoup according to the proper rules.

The errors assigned relate to the prejudice suffered by plaintiff in error in the substantial denial of the right to recover direct losses resulting from the breaches of agreement as alleged, and the "necessary and immediate loss of profits" during the time when, by reason of such breach, the use of the mill and machinery was lost to them.

The learned Court declined to lay down the principles upon which, as plaintiffs in error claimed (Rec., p. 54), the fulfillment of the construction contract depended, and while apparently leaving the actual damages to be ascertained by the jury, really so instructed them, in connection with the rulings upon evidence offered, that the body of the claim for damages was eliminated from the jury's consideration.

The jury were told that no such mill (as the one under question) was known of in the State, and that "whether this mill has a rental value we are unable to say; we are not to assume that it has;" while the best evidence that under such a state of facts would be obtainable, namely, the testimony of the superintendent, a man of twenty years experience in mining and mining machinery, was excluded.

The work of the mill (fol. 93) for a few weeks after its completion was also refused; and the value of ores delivered to it—all elements of actual value, or of rental value, or of the actual facts by which value of opinions concerning either might be tested.

The effect of the Court's refusals and instructions was to leave the plaintiffs in error entitled at the hands of the jury only to a few weeks' interest on an investment, and to a few days' wages when the time of certain regular employees was lost to the mill owners.

Plaintiffs in error claim that there was, under these circumstances, a practical denial of damages for "the loss of the use of the mill and machinery," that the jury were not given *any* method by which such loss in this case could be arrived at; and that the exclusive method hinted at by the Court in the language excepted to at folios 99–100 was necessarily, under the facts of this case, only a repetition of the denial of *any substantial damages* for "the loss of the use of the mill and machinery." For *such* loss, under the rulings below, *nominal* damages only could have been awarded; whereas, as it is claimed, by the true rules proffered to the Court below, the *actual damages were capable of direct ascertainment.*

Furthermore, the Court in terms refused to charge that the jury might "consider the loss of the use of the mill and machinery either wholly or partially resulting from such defects and unskillful performance" by defendants in error (Rec., p. 54).

Six fundamental inquiries are presented by the exceptions in this record:

1. The principles governing the general right of the defendant to recoup damages as claimed.

2. The principles by which such damages should be measured.

3. The right to recover for the *value* of merchandise alleged to have been *sold* and *delivered* and *set in place*, upon the naked testimony that "articles were mentioned" in an "account" not in evidence, and upon a *copy* which under objection was thereupon read in evidence by the witness, a plaintiff, and interest, $233.59, proved by him upon its aggregate, $2,531.78. This evidence, received under objection (Rec., p. 49), "was all the evidence affecting the matters" thus excepted to (Rec., p. 53).

4. Whether under the issues the superintendent of the mill was not competent to testify about the fair rental value of the mill and its attachments (Rec.,fol. 91), or the value of the ores at the mill for milling purposes (Rec., fol. 92).

5. Whether the observations (Rec., p. 53) of Riotti, in respect to a matter foreign to his agency, as alleged by defendant, could properly be received in evidence against defendant. Riotti had nothing "to do with the mechanical construction of the mill" (Rec., p. 52), and plaintiffs' changes in the "original specifications" as to "the conveyors" were "never accepted by the company, they refusing to accept them" (Rec., p. 53). Nevertheless, Riotti's talk about them was testified to in aid of plaintiff's claim for the work done and materials furnished upon these *changed* plans (Rec., fols. 95-96).

6. Whether the actual work done by the mill for a few weeks from December, 1882, could not be detailed in proof for comparison with the actual work done (in quantity of ore) immediately prior to that date while the mill was in its defective condition (Rec., fol. 93).

Assignments of Error.

I. It was error for the Court, upon the direct examination of the witness Chalmers, introduced in behalf of the plaintiffs, to admit in evidence "the paper handed him showing an itemized statement of *account aggregating $2,531.78.*" The paper thus described in the record (Record, folio 90) does not appear by the record to have been authenticated in any other way than by the following questions and answers to the witness Chalmers:

"Q. Has the firm (meaning plaintiffs') now any account not including these notes against the defendant? A. Yes, sir. Q. (Paper shown witness.) Look at that account, and see whether this is a *copy of the account.* A. Yes, sir, Q. State whether the articles mentioned in that account were ordered by the defendant, and if so, when.

"To which question counsel for defendant objected on the ground that the items could not be proved wholesale by the list; but the objection was overruled by the Court; to which ruling of the Court defendant then and there excepted. And thereupon the witness proceeded:

"A. They were ordered at various times by letter and verbally between the 25th day of July and December, 1882. The witness *then proceeded to read the paper* handed him showing an itemized account aggregating $2,531.78."

It was error to permit the alleged sale and delivery of merchandise, and more or less expense involved in

setting it up as machinery ready for operation, to be proved by testimony of this character.

II. The Court erred in assuming that the testimony specified in the foregoing assignment was sufficient evidence of an indebtedness to permit interest on it to be recovered, as testified to under the following question, answer and exception, viz.:

"Q. You may reckon the interest (on said account) from January 1st, 1883, up to this date at six per cent. A. $233.59.

"To which question and answer defendant objected on the ground that it was immaterial; but the objection was overruled by the Court, to which ruling defendant then and there excepted."

III. The Court erred in excluding the testimony of the witness Sabin, introduced on behalf of the defendant, in answer to the question:

"Q. What was the fair rental value of this mill and its attachment? And in giving your answer you can give it at so much per month, year, or such other division of time as may be most convenient and intelligible.

"To this question counsel for plaintiffs objected on the ground that it was not the proper measure of damages and, further, because the witness had not shown himself competent to speak on the subject, and the objection was sustained on the last mentioned ground by the Court; to which ruling and decision of the Court defendant then and there excepted."

The witness had testified that his occupation for the past twenty years had been mining, and that he was in the employ of the defendant as superintendent at the time of the erection of the mill in controversy, and so continued until the mill was shut down. He further testified *inter alia* as follows: "I have been engaged in mining twenty years, and am acquainted with stamp mills, quartz mills and mining machinery" (see Record, page 50).

IV. It was error to exclude the testimony of the same witness (Sabin) under the objection ruled upon and excepted to as follows:

"Q. Have you been engaged about mills enough to know what work they perform, what they can do, what they can earn? A. I have of gold mills. This was the first silver mill I was connected with. Q. Do you know their cost? A. I think I do know something of their cost; have been engaged in construction. The cost of this mill was about $75,000, inclusive of the machinery and everything connected with it. Q. What was the fair rental value per month of this mill and its attachments?

"To this question the counsel for plaintiffs objected on the ground that the witness had not shown himself competent, and the objection was sustained by the Court, to which ruling the defendant then and there excepted."

V. It was error to exclude the testimony of the same witness (Sabin) under the objection ruled upon and excepted to as follows:

"Said witness further testified that the defendant company operated a mine near this mill from which the ore was procured to run through said mill. Q. Was there sufficient quantity of ore in this mine accessible to employ the mill and keep it running to its full capacity? A. Yes, sir. Q. How long have you been mining and been acquainted with ores? A. I have been mining since 1860. Q. Have you during the same time been acquainted with the milling of ores? A. Yes, sir. This mill at Columbus was the first silver mill I had been with; have been engaged in gold ores. Q. You have been acquainted to some extent with silver ores and silver mills? A. Yes, sir. Q. What was the value of these ores delivered at the Columbus mill in this raw state as taken from the mine ready to be milled; what was the value for milling purposes?

To this question counsel for plaintiffs objected; and the objection was sustained by the Court; to which ruling defendant then and there at the time duly excepted."

VI. It was error for the Court to exclude the testimony as objected to, ruled upon and excepted to as follows:

The witness Smith, introduced for defendant, had testified to his experience and personal knowledge of the facts qualifying him to respond (see Record, fol. 93) to the following question, which was then asked:

"Q. Can you state the amount of ore that was milled during the months of March and April following?

"To this question counsel for plaintiffs objected on the ground that it was immaterial, irrelevant and incompetent, and the objection was sustained by the Court, to which ruling and decision defendant then and there at the time excepted."

VII. It was likewise error for the Court to exclude answer to the following question propounded to the same witness:

"Can you give the amount of ore that was milled during the month of January?"

"To this question counsel for plaintiffs objected on the ground last above given; and the Court sustained the objection; to which ruling and decision of the Court the defendant then and there excepted."

VIII. The same witness (Smith) having testified that with the mill in good working order its capacity would have been thirty tons per day, the witness further testified as to the expense of operating the mill, the number and wages of the men, and cost of fuel, the number of days the mill was idle, wholly or partially, by reason of the defects complained of, the saving of wages or diminution of the working force when the mill was idle, and the extent to which employees were turned to other labor while the mill was not running: and was then further interrogated by counsel for defendant:

"Q. What wages would you have been compelled to pay to other men had you employed them to do that same work for which you paid these men during the time the mill was stopped?"

"To this question counsel for plaintiffs objected; and the objection was sustained by the Court; to which ruling and decision of the Court defendant then and there excepted" (Rec., fol. 94).

IX. During the trial defendant introduced a witness, Horace A. Hurlbut, of Chicago, who, being duly sworn, testified that he was managing director of the defendant company in 1881 and 1882, and also testified, among other things, that one Riotti was a mining expert and metallurgist, upon whom the defendant relied as to the best method of extracting silver from the ore, and * * * as to the proper process for the separation of the ores, but relied solely upon the *plaintiffs* for the mechanical construction and erection of the machinery; and further, that Riotti was authorized to give the draughtsman the incline of the hill, * * * the relative positions of where the stamps and the roasting cylinders were to be, and where the furnace should be placed in position, and to give relative positions and distances; and that he did not have anything to do with the mechanical construction of the mill (Record, p. 52).

In rebuttal, the plaintiffs re-called the witness Chalmers, who further testified:

"Hurlbut said that Riotti had been engaged by the New York parties as consulting engineer, as they wanted to hold some one responsible for the working of the ores. We were notified to comply with Riotti's directions. In looking over the original plan of the furnace, the conveyers were shown in the plan, but Riotti said he preferred"——

"Objections by defendant's counsel, who asked and obtained leave of the Court to first cross-examine the witness as to circumstances of the conversation."

"Q. Who was the conversation with? A. I was present during most of the time. Q. Who was with you? A. It was between Riotti, Fraser and myself, and our draughtsman.

" Defendant here objected to the introduction of evidence as to what was said by Riotti, on the ground that Riotti was not shown to have authority to bind the company; but the objection was overruled, to which ruling defendant at the time duly excepted."

The witness then proceeded with his statement of what Riotti said, viz.: " Riotti said he desired us to follow the drawing in making the furnace. This drawing showed the conveyers as afterwards put in the mill. *We changed* the original specifications, *they were never accepted by the company, they refusing to accept them.* We had the acceptance of Riotti of the plan." The foregoing is the substance of " all the evidence affecting the matters " of defendant's exception specified in this assignment of error (Record, p. 53).

X. It was error for the Court in the trial of the cause, after the conclusion of the evidence in chief on the part of the plaintiffs, to permit the plaintiffs to amend the complaint and proceedings by adding the names of two persons, Norman D. Fraser and William J. Chalmers, as parties plaintiffs. Such an amendment (particularly in the absence of evidence to warrant it) peremptorily ordered on the trial after the jury had been sworn and the evidence of plaintiffs had been delivered to the jury, was in effect to permit a stranger to the issue to prosecute the defendant without opportunity to answer his charge according to the due course of the common law before a trial should be had. This amendment was made under the defendant's objection, on the ground that at that stage of said cause, such an amendment would be irregular and improper; and the objection was overruled by the Court and said amendment allowed; to which ruling and decision of the Court defendant then and there excepted.

XI. The Court erred in refusing to instruct the jury

in accordance with the following request, on the right of defendant to recoup damages :

" If the plaintiffs undertook to supply and put up, so it should be complete and in good running order, the mill or machinery mentioned in defendant's second defense, and entered upon the performance of such agreement, and if the machinery supplied proved defective and mechanically inadequate for the purpose intended, or was not completed nor executed in proper manner, or if the work was unskillfully performed, then in this action the defendant would be entitled to recover from the plaintiffs the damages actually sustained by reason of such failure of the plaintiffs to perform their agreement ; and in measuring the damages, if any, sustained by defendant, you may consider—

1. The loss of the use of the mill and machinery, either wholly or partially, resulting from such defects and unskillfull performance.

2. Any sums paid out by defendant in remedying defects and making repairs in such mill and machinery in consequence of such defects."

" Which said instruction the Court refused to give ; and to such decision and refusal the defendant then and there at the time duly excepted " (Rec., fol. 98).

XII. It was error for the Court to refuse to instruct the jury upon the prayer of the defendant, as follows :

" In estimating defendant's damages in consequence of plaintiffs' breach of their undertaking (if you find there was such a breach), you may also consider the necessary and immediate loss of profits incurred by the defendant during the period when the said defendant was, by reason of the alleged defects, deprived of the use of such mill and machinery ; " which said instructions the Court refused to give, and to such decision and refusal the defendant then and there at the time duly excepted " (Rec., fol. 98).

XIII. It was error for the Court to instruct the jury, as it did, respecting the matter of damages, as follows :

" If you find the defendant is entitled to deduct its damages, resulting from delay in the operation of the

mill, from the amount of the plaintiffs' claim, the question then comes, How much? and upon that, as to the delay in operating the mill, whether it proceeded from the conveyers, from the cylinder, or from both, it was undoubtedly entitled to the rental value of the mill, which was not shown. It does not even appear whether there was any rental value for such mill as that. Undoubtedly some kinds of mills at Leadville, and perhaps at other points in the State, have a rental value, but it does not appear that there was any such smelting furnace as that at Leadville, and no such mill is known to the Court. I think stamp mills have a rental value at Central City. We used to hear something of them some years ago, but I do not remember ever to have heard of this particular kind of a mill, with this sort of a cylinder attached to it, in this State, and whether this mill has a rental value we are not able to say. We are not to assume that it has. Counsel for defendant says that the capacity of the mill was thirty tons a day. At the time that evidence was offered it was received to prove the rental value of the mill; that might be the first thing necessary to know about any mill before determining its value for rental.

He proved in addition to that that the cost of treating ore in the mill was six dollars a ton; and upon that he assumes that defendant is entitled to recover the cost of treating ore of the amount or quantity that it was unable to treat by reason of the failure of the mill to operate; *but he is entirely mistaken in the rule.* If you say the mill has a capacity of thirty tons a day and you can recover at that rate, it would give one hundred and eighty dollars a day as the rental value of the mill, which, of course, would be enormous. It is quite obvious that this is not a guide or a matter upon which you can make an estimate of the rental value of the mill. The rental value would be, if it can be shown at all, *what anybody would be willing to pay for such a mill to use in the treatment of their own ore or other ore* which should be brought to him for treatment; of that we have no evidence at all.

In the absence of all evidence as to the rental value we are unable to assume that there is any *evidence of value or that any can be given,* and you are at liberty to allow *interest on the investment.* It was shown in evidence that the mill cost $75,000.

I suppose there is no reasen to doubt that statement. So if you find that the defendant is entitled to deduct damages for delay in running the mill, you can take the time shown before you. I do not say how many days were proven, but you can deduct the time and allow interest on the investment, $75,000, at ten per cent. per annum; that is the best that can be done on this evidence."

To the giving of which instructions and to each several propositions therein contained defendant at the time duly excepted.

XIV. It was error for the Court to instruct the jury, as it did, respecting the matter of damages as follows:

"There is something more in the way of damages than the rental value. There were men employed in the mill whose time was lost while the mill was idle. There was some evidence to the effect that these men were employed some part of the time, I believe not all of it, in other work. No deduction can be made for the time they were so employed, but when there was a loss of time of the men and the defendant was paying them wages, that may be added as an element of damages, as in the case of Smith, the foreman, I believe his wages went on all the time, whether the mill stopped or not, and perhaps there were some others in the same situation."

To the giving of which instructions and to each several proposition therein contained defendant at the time duly expected.

XV. It was error for the Court to instruct the jury as it did, in the following words:

"It is said further that in consequence of the misplacement of the cylinder it was greatly injured; the wheels on which it rested, cutting through the surface of the bands, wore them out so that new bands became necessary as the work went on; sometimes before they would otherwise have been required.

"The defendant thinks, if you find in his favor, that he ought to be allowed the cost of the new bands. It

is not exactly that; it is the injury to the old ones. I believe it was said the first bands ought to have lasted one year, if fairly used. They were so damaged that they had to be taken off in much less than a year. I do not think the cost of the first bands was shown at all. Probably only the cost of the cylinder with the bands on it. The new bands differed in some respects from the old ones. I do not know how you can get on with that, but you can make the best you can of it. *You cannot allow the full amount of the cost of the new bands, the $1,400,* paid, because you have no evidence the bands were worth so much."

To the giving of which instructions and to each several proposition therein contained, defendant at the time duly excepted.

POINTS AND ARGUMENT.

I.

The principles governing defendants' right to recoup damages

seem to be fairly stated in the proposition offered to and refused by the Court below, viz.:

"If the plaintiffs undertook to supply and put up, so it should be complete and in good running order, the mill or machinery mentioned in defendants' second defense, and entered upon the performance of such agreement, and if the machinery supplied proved defective and mechanically inadequate for the purpose intended, or was not complete nor executed in proper manner, or if the work was unskillfully performed, then in this action the defendant would be entitled to re-

cover the damages actually sustained by reason of such failure of plaintiffs to perform their agreement." * * *

[The rule of damages is considered under subsequent points.]

This instruction as requested is in effect a simple amplification of the elementary principle of liability of a party for his unskillful work, and of the principle now deemed elementary that a party undertaking to furnish an article for a designated purpose warrants its fitness for that purpose, particularly when defects may be capable of detection only upon trial of the article. To this extent at least the proposition thus stated needs in this Court no citation of authority.

In the application of this principle there have been collisions of expression between some authorities. This Court, however, after reviewing the leading cases, has restated the law to be, in effect, that "in cases of sales by manufacturers of their own articles for particular purposes communicated to them at the time" the law implies a warranty that the articles are "reasonably fit for the use" designed.

In Kellogg Bridge Co. vs. Hamilton, 110 U. S., 116, it was said:

"According to the principles of decided cases, and upon clear grounds of justice, the fundamental inquiry must always be whether, under the circumstances of the particular case, the buyer had the right to rely and necessarily relied on the judgment of the seller and not upon his own. In ordinary sales the buyer has an opportunity of inspecting the article sold, and the seller not being the maker, and therefore having no special or technical knowledge of the mode in which it was made, the parties stand upon grounds of substantial equality. If there be, in fact, in the particular case any inequality, it is such the law cannot or ought not to attempt to provide against, consequently the buyer in such cases—the seller giving no express warranty and making no representations tending to mislead

—is holden to have purchased entirely on his own judgment. But when the seller is the maker or manufacturer of the thing sold, the fair presumption is that he understood the process of its manufacture and was cognizant of any latent defect caused by such process and against which reasonable diligence might have guarded. This presumption is justified, in part, by the fact that the manufacturer or maker by his occupation holds himself out as competent to make articles reasonably adapted to the purposes for which such or similar articles are designed. When, therefore, the buyer has no opportunity to inspect the article, or when, from the situation, inspection is impracticable or useless, it is unreasonable to suppose that he bought on his own judgment, or that he did not rely on the judgment of the seller as to latent defects of which the latter, if he used due care, must have been informed during the process of manufacture. If the buyer relied, and under the circumstances had reason to rely, on the judgment of the seller [which in the case at bar had been expressly contemplated in the terms of the contract], who was the manufacturer or maker of the article, the law implies a warranty that it is reasonably fit for the use for which it was designed, the seller at the time being informed of the purpose to devote it that use."

This Court then proceeded to inquire to what extent those principles were applicable to that case. Their application to the case at bar is accompanied by the fortifying factor that plaintiffs, as alleged, undertook to set in place and to equip for specified operation as a "twenty-stamp dry-crushing silver mill of full capacity," the "engines, stamps and all other machinery and apparatus" and connections necessary for that purpose at the place described (Rec., fol. 74).

The defendant relied on the plaintiff's judgment and skill that they could do what they held themselves out to do, viz., to furnish and to equip the necessary machines and apparatus, and that the several parts would fulfill

their proper purposes to a given result descriptively measured by the capacity of the mill. In the nature of things, therefore, no act or omission of defendant less than acceptance of a known defect, which is not alleged, would relieve plaintiffs from their obligations to fulfill.

The defendants' new machinery for a twenty-stamp mill to be established or equipped was like the unfinished bridge in Kellogg Bridge Co. vs. Hamilton, constructed for a particular purpose, and was said to accomplish that purpose; and it is intrinsically just that the company which held itself out as possessing the requisite skill to do work of that kind, and therefore as having special knowledge of its own workmanship, should be held to indemnify its vendee against latent defects arising from the mode of construction, and which the latter, as the company well knew, could not by any inspection discover for himself (*Ib.*, p. 119).

The plaintiffs themselves discovered some of their own defects, but for attempting to remedy some of them have, as alleged, charged items to defendant (Rec., fol. 79). This impropriety has been condemned by the jury in so far as the verdict refuses a recovery upon the aggregate items as sued for. It was fundamentally essential to the defendants' rights upon the counterclaim and defense that the jury should be instructed in substance that if the contrivances and constructions furnished by plaintiffs "proved defective and mechanically inadequate for the purpose intended," then the defendant could recover actual damages.

Such instruction was refused.

There is nothing in the record to indicate that this view was communicated by the Court to the jury. On the contrary, had the Court properly charged on this topic, the record undoubtedly would have shown its language concurrently with the explicit refusal to charge as excepted to (Rec., fols. 97–98).

It was error, therefore, to deny instructions stating

the fundamental principle under which "the defendant would be entitled to recover from the plaintiffs the damages actually sustained by reason of such failure of the plaintiffs to perform their agreement." In this respect, therefore, the exception is well taken.

As to the rule of damages there would seem to be no room for fair question to the extent that the two items stated in prayers number 1 and 2 (Rec., fol. 98) are correct in allowing consideration of (1) loss of use from defects in the mill and the machinery and (2), moneys expended in repairing defects.

If this be so the refusal of the instructions covered by the first exception (fol. 98) should reverse the judgment:—(and see next point as to damages). The effect of the Court's refusals was to prevent a complete recoupment against plaintiffs' claim, and to ensure a verdict against the defendant for *some* amount. For this error judgment should be reversed.

II.

Measure of Damages.

The rule of damages for this case is grounded on the plaintiffs' breach of their obligations as described in foregoing point. That the jury found such a breach to have occurred appears at once on comparison of the verdict, $10,500, with plaintiffs' demand for $12,531.78. The improper rule of damages as laid down by the Court prevented the recoupment to which defendant was entitled, and deterred the jury from further reduction or from the possibility of any money verdict against the plaintiffs under the defendants' claim.

The nature and extent of plaintiffs' failure "to perform their agreement" is inconsequential and is not

disclosed by the record. It is sufficient that there was such failure—*a breach* by the plaintiffs. This jury have found such a breach.

By what rule is the plaintiffs' liability for such breach to be measured?

It is here respectfully insisted that the rules proffered by defendants' counsel in the Court below were correct, viz., that the jury might *consider*—

1. The loss of the use of the mill and machinery (and loss of such use is not necessarily *rental* value).

2. Moneys expended in remedying stated defects.

3. "Necessary and immediate loss of profits" incurred by defendant, while by reason of such defects it was deprived of the use of such mill and machinery."

These rules being denied by the Court below are in issue here. Their fundamental propriety, and direct applicability to the facts of this case, is confidently submitted both upon principle and authority.

As to profits, it is conceded that they must be direct and readily ascertainable, *i. e.*, "necessary and immediate," as distinguished from speculative and remote. But the rulings in this case excluded profits, and not only disallowed "gains prevented," but disallowed the losses actually sustained.

Approved Authorities.

The PRINCIPLES AND AUTHORITIES in respect to the *measure of damages* have been passed upon *by this Court*, as indicated in the following extracts: In Western Union Tel. Co. vs. Hall, 124 U. S., p. 454 (Opinion by MATTHEWS, J.), it is said: "It has been well settled since the decision in *Masterton vs. The Mayor of Brooklyn*, 7 Hill, 61, that a plaintiff may rightfully recover a

loss of profits as a part of the damages for breach of a special contract, but in such a case the profits to be recovered must be such as would have accrued and grown out of the contract itself as the direct and immediate result of its fulfilment. In the language of the Supreme Judicial Court of Massachusetts in *Fox vs. Harding*, 7 Cush., 516: "These are part and parcel of the contract itself, and must have been in the contemplation of the parties when the agreement was entered into. But if they are such as would have been realized by the party from other independant and collateral undertakings, although entered into in consequence and on the faith of the principal contract, then they are too uncertain and remote to be taken into consideration as a part of the damages occasioned by the breach of the contract in suit" (p. 522). This rule was applied by this Court in the case of *The Philadelphia, Wilmington and Baltimore Railroad vs. Howard*, 13 How., 307. In *Griffin vs. Colver*, 16 N. Y., 489, the rule was stated to be that the "damages must be such as may fairly be supposed to have entered into the contemplation of the parties when they made the contract; that is, they must be such as might actually be expected to follow its violation; and they must be certain both in their nature and in respect to the cause from which they proceed. The familiar rules on this subject are all subordinate to these. For instance, that the damages must flow directly and naturally from the breach of contract, is a mere mode of expressing the first; and that they must be not the remote but proximate consequence of such breach, and must not be speculative or contingent, are different modifications of the last" (p. 495). In *Booth vs. Spuyten Duyril Rolling Mills Co.*, 60 N. Y., 487, the rule was stated to be that "the damages for which a party may recover for a breach of a contract are such as ordinarily and naturally flow from the non-performance. They must be proximate and certain, or capa-

ble of certain ascertainment and not remote speculative or contingent" (p. 492). In *White vs. Miller*, 71 N. Y., 188, 133, it was said: "Gains prevented, as well as losses sustained, may be recovered as damages for a breach of contract, when they can be rendered reasonably certain by evidence, and have naturally resulted from the breach."

In cases of executory contracts for the purchase or sale of personal property ordinarily, the proper measure of damages is the difference between the contract price and the market price of the goods at the time the contract is broken. This rule may be varied according to the principles established in *Hadley vs. Baxendale*, 9 Exch., 341; *S. C.*, 23 L. J., Ex., 179, where the contract is made in view of special circumstances in contemplation of both parties. That well-known case, it will be remembered, was an action against a carrier to recover damages occasioned by delay in the delivery of an article, by reason of which special injury was alleged. In the application of the rule to similar cases, where there has been delay in delivering by a carrier which amounts to a breach of contract, the plaintiff is not always entitled to recover the full amount of the damage actually sustained; *prima facie* the damages which he is entitled to recover would be the difference in the value of the goods at the place of destination at the time they ought to have been delivered and the value at the time when they are in fact delivered (*Horn vs. Midland Railway Co.*, L. R. S. C. P., 131; *Cutting vs. Grand Trunk Railway Co.*, 13 Allen, 381). Any loss above this difference sustained by the plaintiff, not arising directly from the delay, but collaterally by reason of special circumstances, can be covered only on the ground that those special circumstances, being in view of both parties to the contract, constituted its basis (*Simpson vs. London and Northwestern Railway Co.*, 1 Q. B. D., 274). So the loss of a market may be made an element of damages against a carrier for delay

in delivery, where it was understood either expressly or from the circumstances of the case, that the object of delivery was to get the benefit of the market (*Pickford vs. Grand Junction Railway Co.*, 12 M. & W., 766). In *Wilson vs. Lancashire and Yorkshire Railway Co.*, 9 C. B. N. S., 632, the plaintiff was held entitled to recover for the deterioration in the marketable value of the cloth by reason of delay in the delivery, whereby the season for manufacturing it into caps, for which it was intended, was lost."

In Hinckley vs. Pittsburg Steel Co., 121 U. S., p. 275 (Opinion by BLATCHFORD, J.), it is said in concluding an extract from the opinion in the case of *P. W. & B. R. Co. vs. Howard* (13 How., 307), * * * "Wherever profits are spoken of as not a subject of damages it will be found that something contingent upon future bargains, or speculations, or states of the market, are referred to, and not the difference between the agreed price of something contracted for and its ascertainable value or cost. *See Masterton vs. Mayor of Brooklyn*, 7 Hill, 61, and cases there referred to. We hold it to be a clear rule that the gain or profit of which the contractor was deprived by the refusal of the company to allow him to proceed with and complete the work was a proper subject of damages." This Court then proceeds:

"In *United States vs. Speed*, 8 Wall., 77, where the defendant agreed to pack a specified number of hogs for the plaintiff, and made all his preparations to do so, and was ready to do so, but the defendant refused to furnish the hogs to be packed, this Court, citing with approval *Masterton vs. Mayor of Brooklyn*, held that the measure of damages was the difference between the cost of doing the work and the price agreed to be paid for it, "making reasonable deduction for the less time engaged, and for release from the care, trouble, risk and responsibility attending a full execution of the contract."

These views were also approved by this Court in *United States vs. Behan*, 110 U. S., 338, where it is said (Opinion by BRADLEY, J.):

"The second item, profits, cannot always be recovered. They may be too remote and speculative in their character, and therefore incapable of that clear and direct proof which the law requires. But when, in the language of Chief-Justice NELSON, in the case of *Masterson vs. Mayor of Brooklyn*, 7 Hill, 69, they are 'the direct and immediate fruits of the contract,' they are free from this objection; they are then 'part and parcel of the contract itself, entering into and constituting a portion of its very elements; something stipulated for, the right to the enjoyment of which is just as clear and plain as to the fulfillment of any other stipulation.' Still, in order to furnish a ground of recovery in damages, they must be proved. If not proved, or if they are of such a remote and speculative character that they cannot be legally proved, the party is confined to his loss of actual outlay and expense. This loss, however, he is clearly entitled to recover in all cases, unless the other party, who has voluntarily stopped the performance of the contract, can show the contrary.

The rule as stated in Speed's case is only one aspect of the general rule. It is the rule as applicable to a particular case. As before stated, *the primary measure of damages is the amount of the party's loss;* and this loss, as we have seen, may consist of *two heads or classes of damage—actual outlay and anticipated profits.*" * * * "If he chooses to go further, and claims for the loss of anticipated profits, he may do so, subject to the rules of law as to the character of profits which may be thus claimed. * * *

"It is unnecessary to review the authorities on this subject. Some of them are referred to in the extract made from the opinion of the Court below; others may be found referred to in Sedgwick on the Measure of Dam-

ages in Smith's Leading Cases, Vol, 2., p. 36, &c. (notes to *Cutter vs. Powell*). Addison on Contracts, §§ 881, 897. The cases usually referred to, and which, with many others, have been carefully examined, are *Planché vs. Colburn*, 5 C. & P., 58; *S. C.*, 8 Bing., 14; *Masterson vs. Mayor &c., of Brooklyn*, 7 Hill (N. Y.), 61; *Goodman vs. Pocock*, 15 A. & E., 576; *Hadley vs. Baxendale*, 9 Excheq., 341; *Fletcher vs. Tayleur*, 17 C. B., 21; *Smeed vs. Ford*, 1 El. & El., 602; *Inchbald vs. Western, &c., Coffee Company*, 17 C. B. N. S., 733; *Griffen vs. Colver*, 16 N. Y., 489, and the case of *United States vs. Speed*, before referred to."

Upon these recognized authorities plaintiffs in error further submit:

"Damages are a compensation or equivalent for something else which has been agreed to be done and which has not been done. What the damages would *ordinarily* be on such a default is immaterial if the contracting party assumed the obligation which he has broken, with the knowledge of a peculiar state of facts connected with the contract which indicated that other damages would result from a breach, and the latter are claimed. To confine the injured party's recovery in such case to the lighter damages which usually follow such breach where no such specified facts exist, and exclude those which are thus brought within the contemplation of the parties, would be to sacrifice substantial rights to arbitrary rule; to set aside the principle which entitles a party to compensation commensurate with his injury, to give effect to a rule formulated to render that principle effectual. It would be to apply a subordinate rule where it has no application, instead of the principle which is paramount and always applicable" (1 Sutherland on Damages, p. 90).

In Masterton vs. City of Brooklyn, 7 Hill, 69, it is said: "It is difficult to comprehend why, in case one party has deprived the other of the gains or profits of the contract by refusing to perform it, this loss should

not constitute a proper item in estimating damages;" and again, after approving cases in which the profits of a good bargain were regarded as a legitimate item of damages, where such profits often constitute the only ground of any substantial recovery, it is said by the Court: "The only difficulty or embarrassment in applying the general rule grows out of the fact that the article in question does not appear to have any real ascertained market value. But this cannot change the principle which must govern, but only the mode of ascertaining the actual value of the article," or its cost of production. * * * "There can be no difference between the damages which should be recovered for the breach of an ordinary agreement to buy or sell goods and one to procure building materials and fit them for use and deliver them in a finished state at a stipulated price (p. 74). In either case should the wrongdoer be allowed to profit by his wrongful act."

In White vs. Miller, these proceedings were reaffirmed and extended to a case of damages arising from the implied warranty accompanying the sale of alleged Bristol cabbage seed, the implied warranty being that if such seed was free from any latent defect arising from the mode of cultivation, and that it would produce, under proper cultivation, a crop of genuine Bristol cabbages; and it was *held* that the proper measure of damages was the difference in value between the crop raised from the defective seed and a crop of Bristol cabbages, such as would ordinarily have been produced that year. "Gains prevented, as well as losses sustained, may be recovered as damages for a breach of contract (p. 133), where they can be rendered reasonably certain by evidence, and have naturally resulted from the breach," citing 7 Hill, 761; 16 N. Y., 489; 40 N. Y., 422. "But mere contingent or speculative gains or losses *with respect to which no means exist of ascertaining with any certainty* whether they would have resulted or not, are

rejected, and the jury will not be allowed to consider them."

Can it be said that the damages in that case or in the case at bar, "are incapable of being ascertained with reasonable certainty by a jury? The character of the season, whether favorable or unfavorable for production; the manner in which the plants set were cultivated; the condition of the ground; the results observed in the same vicinity where cabbages were planted under similar circumstances; the market value of Bristol, and value when the crop matured; the value of the crop raised from the defective seed; these and other circumstances may be shown to aid the jury, and from which they can ascertain approximately the extent of the damages resulting from the loss of a crop of a particular kind." So in the case at bar, the earnings to result from the treatment of ores by a mill of a given capacity, were capable of being ascertained, not only "with reasonable certainty," but with exact arithmetical precision.

In 1 Suth. on Dam., p. 108, it is said: "Ascertainment of damages may involve an inquiry into the advantages derivable from the delivery of articles of the required description, or suitable for the contemplated use, and of losses occasioned by the breach, with reference to the particular purpose of the contract as known to the parties."

In *Fletcher vs. Tayleur, 17 C. B., 21*, failure to deliver a ship intended for a designated special trade from August 1st, 1884, to March, 1885, was followed by damages estimated upon the freights the ship would have earned beyond what she did earn (1 Sedg. on Dam., 123).

In Geselschafft vs. Armstrong, L. R. 9 C. B., 473, plaintiff contracted for purchase of 666 sets of wheels and axles to be used in the manufacture of wagons; and the wagons he had contracted to sell and deliver to a Russian company by a certain day, or forfeit two

roubles a wagon per day. The defendant, who had contracted to sell the wheels and axles was informed of the other contract, but not of the amount of the penalties. Some delay occurred in the plaintiff's deliveries by defendant's fault, and plaintiff had to pay £100 in penalties, and sued for that sum from defendants. There was no market in which the goods could be obtained, and it was, therefore, construed in behalf of the defendant that only *nominal* damages could be recovered. The Court held defendant liable for substantial damages, not for the penalties, because he had no notice of them, "but the reasonable value of the use of the wagons during the delay," and a verdict of £100 was sustained. If this amount could only be come at by laying down the law that plaintiffs were entitled to recover penalties, "we should pause before we allowed the verdict to stand."

So here, the reasonable *use* of the mill could only be arrived at by the excluded testimony (fol. 93), the ores at hand for milling purposes, and what it was worth to mill them (fol. 94), as well as what labor it was necessary to pay for when the mill was stopped. The result of the trial below was, therefore, an award of almost *nominal* damages and refusal of the *substantial* damages.

Terra Haute & I. R. R. Co. vs. Strubble, 109 U. S., 383, seems to be an authority in this Court, under which evidence should have been received of the quantities of ore capable of being milled, with a view to compare the same with the reduced quantity milled in consequence of the defects occasioned by improper work. In that case the number of cars loaded, but not sent to the plaintiff's yards under the contract, was held to be proper item of evidence with a view to compute actual damages.

If the mill had no rental value, *i. e.*, no general market value—either because there were none such available in the State for use or as standards of comparison with the mill and machinery in question, or

had been none, it would seem that the following expressions of authority were applicable: "Its value should have been ascertained from witnesses whose skill and experience enabled them to testify directly to such value, in view of the hazards and chances of the business" to which the mill and apparatus were to be devoted (*Rhodes vs. Beard, 16 Ohio St., 573*). "This would only be applying the same principle for ascertaining the value of property which by reason of its limited use had no market value, which is adopted with reference to proving the present worth of the use of property which, by reason of its being in greater demand, has a market value." Mr. Sabin need not necessarily himself have hired that which nobody in Colorado had hired, in order to state the value of the loss of use. Why, then, exclude his testimony (fols. 90, 91)?

In Simpson vs. N. W. R., 1 Q. B. D., 274, damages were allowed for plaintiff's loss of custom by reason of defendant's failure to deliver samples by a stipulated time. The samples were to be used at a fair, and arrived only "after the fair." The "rental value" of such chattels under these circumstances was in no aspect any equivalent for the loss of their use, for which loss the actual damages exactly ascertainable were allowed. "Rental value," if any such thing could be possible in such a case, would be practically a denial of any damages or at most nominal damages; whereas, actual losses, as shown, were recovered.

Schile vs. Brokhaus, 80 N. Y., 614, was an action for trespass for interference with a party wall, occasioning interruption of businesss. Evidence was given of the amount of business previously done and how much loss and how much business was done pending the injury, and a comparison made of the business of corresponding months in previous year, and the profits upon the business; so that where the evidence sufficed to show that the damage was occasioned by the wrongful acts

of defendant; the loss of profits thus estimated was held (CHURCH Ch. J.) to be a proper item, and the recognized authorities allowing profits were approvingly cited.

The mill, machinery and apparatus which form the subject of dispute here are chattels in which *rental value* is no fair measure of damages arising from defective conditions.

The direct loss of the *use* of a chattel may be and inherently is quite a different thing than the market price of its hire, especially when there is none such for hire.

Use is by no means equivalent to "rental value." There may be absolutely no *rental* value in some instances, and yet exist ascertainable direct pecuniary damage from the loss of use.

"Rental value" may be one of several *factors* in ascertaining *actual* damages arising from loss of *use*, but it is not its substitute and equivalent. The true rule and the reason of the rule allowing *actual* damages is to be preserved, and may not be destroyed by comparison of definitions of the legal terms technically styled *use* and *rent*, or rental value.

The issue at bar concerns personalty, or at most only *some* personalty attached to the realty; and the true inquiry is the *damages* directly dependent on deprivation of the thing itself. The facts, and whole truth respecting that use and its loss, wholly or partially, is to be detailed in proofs. The claim here is that the jury should have been allowed to consider these proofs.

III.

Two cases may be cited in which the foregoing principles were applied to a set of facts quite analagous to the issues at bar.

In *Hinckley vs. Beckwith, 13 Wis., 31,* in an action against the lessors of a saw mill for a breach of contract to repair, whereby the mill was rendered useless to the lessees during the latter portion of the term, it was *held* that the lessees were entitled to recover as damages the amount paid by them for hauling their logs which were on hand to another mill and the cost to them of getting them sawed there, above what it would have cost them to saw them at their own mill, and also the *profits which they would have made from manufacturing lumber* in that portion of their term during which they lost the use of the mill through the fault of the defendants, deducting the time which it would have required to saw the logs which they had so hauled to the other mill, to which interest might have been added at the discretion of the jury. After another trial, when the case came again before the same Court (17 Wis., 426), the propriety of these items as damages was recognized. The Court had said (13 W., 31) it was "very easy to ascertain profits which were the direct and immediate results of operating the mill for sixty days." Logs enough were on hand to stock the mill for half that time, and timber was standing near for the rest of the time. "*What, therefore, could be made in running the mill per day over and above all expense of rent, labor, etc., was susceptible of exact and definite proof.*" It is not like anticipated profits dependent on some collateral undertaking, but profits arising from the business itself. "The profits upon the manufacture of lumber were so much per thousand, and it was, therefore, an easy matter to ascertain the gross earnings of the mill." (So in the case at bar, the profits on running a given number of tons per day were easily stated with precision.) These earnings constituted a proper item in estimating the damages, resulting from the breach of the agreement to repair.

In Davis vs. Talcott, 4 Barb., 611 (New York General Term, TAGGART, MARVIN and HOYT, JJ.), damages were

claimed for the defective execution of a contract to construct and put up machinery in a flour mill in a well finished, workmanlike manner and of sufficient size and strength to correspond with the cylinders. Upon the breach of agreement being shown, it was held that the proper measure of damages was the difference between the value of the machinery actually put up and that agreed to be constructed; and that if the jury found the machinery was not properly constructed such sum might be recovered as would be sufficient to put the same in the condition contemplated by the contract; and also *such sum as the mill would have earned during the time it was necessarily delayed in consequence of the breakage or defects in the machinery*, taking the fair ordinary earnings of the mill after deducting from the gross earnings the expenses of running the same, as the net profits. So the jury might ascertain how long performance of a contract was unreasonably delayed, and then if plaintiff was in a condition to work his mill by having grain to grind, and was prevented from grinding the same by the defendant's unreasonable delay, plaintiffs might recover damages to the gross amount of the earnings of the mill after deducting the expenses of running same. When a person undertakes to erect a building or put a mill or machinery in operation he ought to be holden to indemnify the other party against the loss of the building, mill or machinery after the expiration of the time for performing the contract. And in case it was defectively made, he should indemnify the party for the loss of the use of the property during the time necessarily spent in repairing it and putting it in order. Particularly would this be so in a case where the defendants had undertaken to put up such machinery as would be adequate to described purposes; and an agreement to pay all damages resulting from the non-fulfillment of an agreement is only expressing that which the law implies.

This last cited case cites an earlier case in New York

to the same effect, saying: "If the plaintiff was entitled to recover in that case, for the loss of the use of the mill and machinery, for the three months delay between the time of the performance of the contract and the time it was in fact performed, and for the further three months consumed in efforts on the part of the defendants to remedy the defects, the plaintiffs in this cause are surely entitled to recover the ordinary earnings of the mill during like periods. In other words, what the mill would have earned in grinding for hire at the ordinary reasonable price per barrel, or what the rent of the mill would have been worth for the same period," not meaning hereby speculative damages from transactions of purchase of wheat and selling flour at an advance. Such are not the gains contemplated, being too speculative. "The plaintiffs in this case only recovered for the loss of the use of the mill and machinery. I think upon that case, as well as on the principle, the ruling of the Circuit was correct. It is most unjust to compel the owner of a mill or other machinery, to lose the entire use of his mill or machinery during the time defective machinery is undergoing repairs, and be permitted to recover barely the cost of putting it in the condition the contract required it to be put." (*Ib.*, p. 627).

When parties make a contract which one of them breaks or neglects to keep, the law says that the delinquent party must recompense the other for all the natural and direct damage which results from such breach; so on a contract by which plaintiff undertakes to get out and deliver to the defendants a certain quantity of logs, while defendants were to furnish him all necessary supplies for men and teams, where it appears that in consequence of defendants' failure to perform on their part plaintiff was able only to deliver a part of the logs, plaintiff is entitled to recover not only the profits which he would have realized from the delivery of the logs which he was prevented from delivering and

the contract price of those actually delivered, but also the extra expense in delivering the latter caused by defendant's fault; and plaintiff, as a witness, might state what it would have cost him had he been well supplied (49 Wis., 151).

IV.

The Actual Losses.

1. It would be an anomalous result if in an agricultural case the *actual* damages directly consequent upon a loss of profits from defective seed should be allowed, while in a manufacturing case the actual damages directly consequent upon a loss of profits from defective machinery should be refused ascertainment.

The same principles of exactness, capability of precision in the elements of ascertainment, and of the necessary and immediate relation of the profits actually lost should apply as well to a manufacturing as to an agricultural contract.

The circumstances exhibited by this record on the subject of damages are an actual loss of certain moneys expended in labor, materials and for repairs of defects and for idle periods and other items of this character, all equally certain and ascertained, and of the loss of the use of the things contracted for, viz., "a twenty-stamp dry crushing silver mill of full capacity," during specific periods. The given capacity and the ores on hand demonstrate exactly what work was thus actually lost, and the profits on such lost work become exactly ascertainable by arithmetical calculation founded upon the evidence. This calculation could have been made by the jury (had it been permitted) either upon the

basis of so much per ton net, or so much in gross for the tons of work lost, from which proper items of labor, fuel, other cost, etc., were to be deducted.

All of this possibility or calculation, however, was taken from the jury; and the effect of the Court's rulings was to prohibit the jury from considering any of the evidence appertaining to such items. As a result, no verdict for defendant was possible.

The further circumstance exhibited in the record that there existed no counterpart in the state of the mill and machinery demonstrates the absence of any "market value," so to speak, of the mill for hire. No witness stating what the *use* of the mill was *worth* could depose that *he* had hired such a mill and machinery. He could only furnish his opinion as to what it might be worth and state the facts upon which his *opinion* was based, so that the jury could appreciate the value of such an opinion. But, without the opinion, the *facts* upon which it would necessarily be based would be equally competent for the jury to consider. With such facts before them, indeed, the jury might themselves arrive at a just conclusion. At any rate, the circumstances in detail were not to be shut out because of the absence of opinion. But in this case where no market value for hire existed, even opinion as to such fancied value would be of little if any value. So in this case, the questions put to the witness, Mr. Sabin, called for the *fact* as to what the use of the mill, etc., was worth for milling purposes (see pp. 50–52).

A more competent witness from observation and experience could scarcely be imagined to answer such a question than one who had been occupied in mining and mining machinery for twenty years, and who by his avocation as superintendent of the defendant's mine at Columbus, Colorado, was pre-eminently qualified to detail the facts of the worth of the machines at that place. Either he might detail these facts and the jury be left to figure therefrom the actual and direct losses,

or else he could himself state the value of the use, and let the jury subject his statement to appropriate tests.

The necessary effect of the rulings of the Court was to prohibit either course, and thus to eliminate from any estimation by the jury the actual losses immediately consequent upon a *loss of the use*. This loss is not rental value, but a loss of *use*, shown to be different and apparently distinguished by the Court from so-called rental value—an impossible factor in this case.

Thus loss of use was withdrawn from the jury by the refusal to charge as requested, and the exclusion of the questions repeated in several forms to Mr. Sabin.

For this alleged error the cause should be remanded.

2. Speculation upon this argument as to the effect of applying the measure of damages as proffered to the facts in the case at bar is unnecessary, because the only issue here is as to the propriety of these rules stated at page 54 of record.

But the application of these rules to the proofs is really quite simple. Nor would it seem to result arithmetically in "$180 a day as the rental value of the mill," as the Court below suggested (Rec., fol. 100); yet if it *did* give that result the accuracy of a necessary *judicial* conclusion that this "of course would be enormous," is not obvious. It may be that the actual damages were "enormous." Such enterprises are apt to fail and utterly to collapse when a lingering and apparently certain fruition finally banishes all hope of the anticipated profits upon which the finances for the enterprise had depended.

In September the mill and machinery was reported ready. Instead of its true capacity of 30 tons per day September averaged only 13 tons per day. So in October the mill averaged only 19 tons per day; in November 22 tons per day, and in December 18 tons (fols. 93–94). Why should not January, March and April have

been given? This was refused under exception. The operations during the twelve weeks of "remedying defects" should have been compared with the operations of the next few weeks so as to exhibit the final workings and results of the machinery and its producing powers.

If the cost of milling (fol. 94) or the price paid the mill per ton had been $6, then in September its gross earnings were (30 tons less 13 tons x $6) $102 per day; in October, $66 per day; in November, $48 per day; in December, $72 per day, from which, of course, proper allowances, as shown (Rec., fol. 94), were to be deducted. It was inaccurate and error to state that there was a damage of $180 per day sought by the proofs and rules proffered, as stated by the Court. Under the proofs $180 per day was to be diminished by the profit on the ore that was actually treated per day.

There was nothing indirect, remote, unreasonable or speculative about permitting the jury to *consider* items of this character in their efforts to fix actual and direct losses. Given the cost of milling per ton $6, and what was actually milled (*e. g.*, in September 17 tons per day), and given the number of tons, the same machinery and labor, with slight additional fuel was capable of milling, then the actual losses per day are ascertained with arithmetical precision. The cost of fuel, differences in labor account, etc., were items properly covered by the testimony (Rec., fol. 94); so that the prohibition against consideration by the jury of actual and direct losses thus ascertainable and the explicit refusals to instruct in accordance with the true measure of damages proposed in behalf of the counterclaim exhibit error and entitle plaintiffs in error to a new trial.

V.

Inadmissible Declarations of Agents.

An exception was taken to the declarations of Riotti on the ground that they were not made within the business of his agency, if he had any. The principle in this respect is well stated by the New York Court of Appeals in *White vs. Miller, 71 N. Y., p 136*, thus: "the rule that the declarations of an agent are inadmissible to bind his principle unless they constituted an agreement the agent is authorized to make, or relate to and accompany an act done in the course of the agency, is applicable to all cases whether the agent is general or special, or the principal a corporation or a private person." Riotti (see Mr. Hurlburt's testimony) was not an "agent," but only defendant's private adviser in specific things. He was defendant's "mining expert and metallurgist." His advice was employed "as to the best method of extracting silver from the ore." It was on his recommendation that "the White roasting furnace had been selected;" but he had nothing "to do with the mechanical construction of the mill;" for this defendant "relied solely on the plaintiffs" (see Rec., fol. 95.). Riotti was never sent to the plaintiffs in respect to any matter purported to be covered by his alleged declaration admitted in evidence against the defendants. He had no business with the plaintiffs or authority from the defendants to bind them in any wise to the plaintiffs. This fact is verified by the testimony of the plaintiff Chalmers, who shows that the defendants repudiated or refused to accede to any of the changes of the plans concerning which Riotti is alleged to have made binding admissions; and that this refusal was as soon as the changes were made known to the defendants. As Mr. Chalmers says: "We changed the original specifications; they

were never accepted by the company, they refusing to accept them" (Rec., fol. 96). Upon these facts, Riotti's declarations were inadmissible.

This exception is assigned for error.

VI.

The Tenth Assignment of Error.

The fundamental objection as stated in the assignment of this specification of error, it is respectfully submitted, is applicable in this case without the limitation of any judicial discretion that might be claimed to have been invoked if a proper foundation for it had been laid. In the case at bar, the record shows that after the jury had been sworn and the evidence in chief delivered, the plaintiffs, without giving any evidence in respect to the propriety of such amendment, procured the addition of Norman D. Fraser and William J. Chalmers to the parties plaintiff. To this appropriate exception was taken. The record (folio 97) states, "all the evidence affecting the matters of defendant's exceptions herein;" and nothing is disclosed touching the propriety of adding two persons to the parties plaintiff. If upon any theory the Court had discretion in this matter, that discretion is a proper subject of exception if unlawfully exercised, as it must have been when there was no evidence whatever upon which such discretion could be based. Nothing appears in the record to connect the persons thus named with the causes of action upon which the verdict was based.

VII.

The first assignment of error. Inadmissibility of unproved copies of unproved accounts.

The reading in evidence of a *copy* of an account made out by plaintiffs, when the account itself was not produced, and no foundation had been laid by proofs essential to the admission of the original, is a vicious species of evidence unacceptable to elementary principles. There was no suggestion of an "account stated." and no such cause of action was alleged. The proof was supposed to relate to an issue for the recovery of the *fair value* of chattels sold and delivered. To say that chattels were "ordered" which when itemized on some unauthenticated list or paper "aggregated" in dollars the amount corresponding to the plaintiffs' claim, is to dispense with the necessity of proof as to *delivery* or acceptance, and of proof as to *value* or agreed price.

These elements are essential factors in proofs as to a sale and delivery and of the amounts recoverable therefor.

It does not progress towards these factors to read copies of unproved original accounts; and the initial incompetency of such copies is fortified when considered in connection with the illegitimate purpose for which they are offered.

The absence of the plaintiffs' original account was not explained. The faithfulness or existence of any such original accounts was not shown, nor was the necessity or propriety of resorting to proofs from the plaintiffs' books, or to other secondary evidence, in any wise hinted at. Moreover, such books, even if admissible, would not of themselves supply evidence of the *value* of chattels which they might describe.

The salutary rules which pronounce the conditions upon which a plaintiff may adduce his own books in his own behalf are elementary, and not to be lightly relaxed.

The effect in the case at bar of violating these rules was to permit an unproved copy of an unproved list or account to be read in evidence for the purpose of arriving at an aggregate *value* of certain chattels, and for the purpose of proving *such value*, as well as the *delivery* of such chattels, and of proving and recovering interest upon the aggregate moneys stated in such an unauthenticated paper. The effect, therefore, of the ruling of the Court below was to dispense with competent proofs of actual delivery and of true value from the lips of witnesses having knowledge of such delivery and of such value.

The reception of such evidence (fol. 90), it is confidently submitted, was error, and should reverse the judgment.

The authorities are overwhelming that the account offered was inadmissible.

a. Because it was a copy. Gale vs. Nevins, 2 McLean, 469. Ellicott vs. Chapman, 1 Cr. C. C., 419. Wallace vs. Bradshaw, 6 Dana, 387. Drummond vs. Hyams, Harp. S. C., 268.

b. There was no evidence who made the entries. Tunno vs. Rodgers, 1 Bay S. C., 480; Elms vs. Chevis, 2 McCord (S. C.), 349; Marton vs. Fyffe, Dudley, Geo., 16.

c. There was no evidence that the books were fair. Burke vs. Wolfe, 6 Jones & Spencer, N. Y., 263.

d. Or that the entries were made at the time. Penn. vs. Watson, 20 Mo., 13; Bowet vs. Smith, 8 Geo., 74; Toomer vs. Gadson, 4 Strobh. (S. C.), 193.

e. That there were any other dealings. Corning vs. Ashley, 4 Denio, 354.

f. The original books were not produced. Churchill vs. Fullian, 8 Iowa, 45.

g. Nor of an account stated. There is no proof that the account was ever delivered, and if there were, that would not make it an account stated without proof of acquiescence, which is lacking (Irving vs. Young, 1 S. & S., 33; Stenton vs. Jerome, 54 N. Y., 480; Lockwood vs. Thorne, 11 N. Y., 170).

The reception of evidence as to interest was error for which the case should be reversed. This evidence seems to have been received upon the theory that there was an open account. An open account does not bear interest in the absence of a special agreement (Marsh vs. Fraser, 37 Wis., 149; F. L., etc. Co. vs. Mann, 4 Robt. (N. Y.), 356; Williams vs. Hersey, 17 Kan., 18; Noe vs. Hodges, 5 Humph. (Tenn.), 103).

VIII.

For the reason, assigned, the judgment should be reversed and a new trial ordered to be had in conformity with the true rules by which the defendant's actual damages shall be ascertained.

N. Y. March 6th, 2889.

HENRY EDWIN TREMAIN,
MASON W. TYLER,
For Plaintiff in Error.

SUPREME COURT OF THE UNITED STATES.

OCTOBER TERM, 1886.

No. 859.

ALEXANDER B. McKINLEY, PLAINTIFF IN ERROR,

vs.

JEROME B. WHEELER, AND CLINTON MARKELL.

IN ERROR TO THE CIRCUIT COURT OF THE UNITED STATES FOR THE DISTRICT OF COLORADO.

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TRANSCRIPT OF RECORD.

SUPREME COURT OF THE UNITED STATES.

OCTOBER TERM, 1885.

No. 254.

GEORGE M. PETERS, APPELLANT,

vs.

THE ACTIVE MANUFACTURING COMPANY.

APPEAL FROM THE CIRCUIT COURT OF THE UNITED STATES FOR THE SOUTHERN DISTRICT OF OHIO.

FILED APRIL 6, 1886.

SUPREME COURT OF THE UNITED STATES.

OCTOBER TERM, 1888.

No. 254.

GEORGE M. PETERS, APPELLANT,

vs.

THE ACTIVE MANUFACTURING COMPANY.

APPEAL FROM THE CIRCUIT COURT OF THE UNITED STATES FOR THE SOUTHERN DISTRICT OF OHIO.

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1 At a stated term of the circuit court of the United States within and for the sixth judicial circuit and the western division of the southern district of Ohio, begun and held at the court-rooms, in the city of Cincinnati, in the division and district aforesaid, on the first Tuesday of October, being also the sixth day of that month, in the year of our Lord one thousand eight hundred and eighty-five, and in one hundred and tenth year of the Independence of the United States of America—present, the Honorable George R. Sage, one of the judges—among the proceedings had were the following, to wit:

GEORGE M. PETERS, Complainant,
vs.
THE ACTIVE MANUFACTURING COMPANY, Respondent.
} In Equity. No. 3630.

Be it remembered that heretofore, to wit, on the twenty-first day of April, in the year of our Lord one thousand eight hundred and eighty-four, came the said complainant herein, the said George M. Peters, as aforesaid, by Wm. Hubbell Fisher and Jason W. Firestone, his solicitors, and filed in the clerk's office of the court aforesaid *in* this his certain bill of complaint herein, and which said bill of complaint so as aforesaid filed is clothed in the words and
2 figures as follows, to wit:

3 *Bill of Complaint.*

Circuit Court of the United States for the Southern District of Ohio, Western Division. In Equity.

GEORGE M. PETERS
vs.
THE ACTIVE MANUFACTURING COMPANY.

To the honorable the judges of the circuit court of the United States for the southern district of Ohio, western division:

George M. Peters, a citizen of the State of Ohio and residing at the city of Columbus, in said State, brings this his bill of complaint against The Active Manufacturing Company, a corporation organized under and by virtue of the laws of the State of Ohio, and as such having its principal office in the city of Cincinnati, in the county of Hamilton and State of Ohio; and thereupon your orator complains and says—

That on and prior to the seventeenth day of July, A. D. 1883, he was the original and first inventor or improvements in dies for making dash frames, fully described in the letters patent hereinafter mentioned, and which had not been known or used before his said invention, and which, at the time of his application for letters patent, as hereinafter mentioned, had not been for more than two
4 years in public use or on sale with his consent and allowance.

And your orator further shows unto your honors that your

orator, being so as aforesaid the first inventor and discoverer of said improvements, and being also a citizen of the United States, did, on July 17th, A. D. 1883, upon due application therefor, obtain letters patent of the United States for said invention, in due form of law, under the seal of the Patent Office of the United States, signed by the Secretary of the Interior and countersigned by the Commissioner of Patents of the United States, bearing date the day and year last aforesaid and numbered 281,553, whereby there was granted and secured to your orator, his heirs, administrators, or assigns, or intended so to be, for the term of seventeen years from and after the date of said letters patent, the full, exclusive right and liberty of making, constructing, using, and vending to others to be used the said invention and improvements as set forth in said letters patent, which are now of record in the Patent Office of the United States, and by virtue whereof your orator became and now is the sole owner of all the rights and privileges granted and secured or intended to be granted and secured in and by the said letters patent, as by the said letters patent, or a duly authenticated copy thereof, here in court to be produced, will more fully appear.

And your orator further shows unto your honors that by virtue of the premises your orator became and now is the sole and exclusive owner of said letters patent and the inventions and improvements described therein, and of all the rights and privileges granted and secured or intended to be granted and secured thereby, and that since he became the owner thereof as aforesaid he has invested and expended large sums of money and has been to great trouble in and about said invention and for the purpose of carrying on the business of manufacturing vehicle dashes to be sold as independent articles of manufacture, and also for the purpose of carrying on the business of manufacturing vehicle dashes to be applied to vehicles manufactured, by your orator and making the same profitable to himself and useful to the public, and that the said invention has been and is of great benefit and advantage, and that great numbers of vehicle dashes have been manufactured, by the use of said invention, by the Peters Leather Dash Company and the Columbus Buggy Company, of the city of Columbus, State of Ohio, and of which firms your orator is a member, and sold by said Peters Leather Dash Company and by said Columbus Buggy Company, in part as attached to vehicles made by them and for the largest part as independent articles of manufacture, to great advantage to the public, and that the public have generally acknowledged and acquiesced in the aforesaid rights of your orator, and your orator believes that he will realize and receive large gains and profits therefrom if infringement by said defendants *by said defendant* and its confederates shall be prevented.

Yet the said defendant, well knowing the premises and the rights secured to your orator aforesaid, but contriving to injure your orator and to deprive him of the benefits and advantages which might and otherwise would accrue unto him from said invention, after the issuing of the letters patent aforesaid and before the commencement of this suit, did, as your orator is informed and

believed, without the license or allowance and against the will of your orator, and in violation of his rights and in infringements of the aforesaid letters patent No. 281,553, unlawfully and wrongfully and in defiance of the rights of your orator, make, construct, and use the said invention in manufacturing great numbers of vehicle dashes, and did sell the said dashes and supplied the market therewith, and that it is still threatening to use and does use the said invention to a great extent—

8 All in defiance of the rights acquired by and secured to your orator as aforesaid, and to his great and irreparable loss and injury, and by which he has been and still is being deprived of great gains and profits which he might and otherwise would have obtained, but which have been received and enjoyed, and are being received and enjoyed, by the said defendant by and through his aforesaid unlawful acts and doings.

And your orator further shows unto your honors, on information and belief, that said defendant, The Active Manufacturing Company, sold large quantities of dashes made by the use of said invention and improvements, and has a large quantity of said dashes on hand which it is offering for sale, and has by the use of said invention made and realized large profits and advantages therefrom, but to what extent and how much exactly your orator does not know, and prays a discovery thereof.

And your orator says that the use of the said invention by said defendant, and its preparation for and avowed determination to continue the same, and its other aforesaid unlawful acts in disregard and defiance of the rights of your orator have the effect to

9 and do encourage and induce others to venture to infringe said patent in disregard of your orator's rights.

And your orator further shows unto your honors that he has caused notice to be given to said defendant of said infringements, and of the rights of your orator in the premises, and requested it to desist and refrain therefrom; but it has disregarded said notice, and refused to desist from said infringements and still continues to use the said invention in making dashes in great quantities.

And forasmuch as your orator can have no adequate relief except in this court, to the end, therefore, that the said defendant may, if it can, show why your orator should not have relief hereby prayed, and may, upon its oath and according to its best and utmost knowledge, remembrance, information, and belief, full, true, direct, and perfect answers make to the premises, and to all the several matters hereinbefore stated and charged, as fully and particularly as if severally and separately interrogated as to each and every of said matters, and may be compelled to account for and pay to your orator the profits by it acquired and the damages suffered

10 by your orator from the aforesaid unlawful acts.

To the end, therefore, that the said defendants may, if they can, show why your orator should not have the relief prayed for, and full, true, direct, and perfect answers make (but not under oath), according to its best and utmost knowledge, remembrance, informa-

tion, and belief, and from the information of its clerks, agents or workmen:

Firstly. Whether since July 17th, 1883, and before the 10th day of April, 1884, the said defendant has made or caused to be made, a die (viz., an upper die and a lower die or two opposing dies) for making dash frames or portions of said frames like the set of dies shown in figure one of the drawing accompanying said letters patent No. 281,553 and described in those portions of the printed specifications of said patent which relates to and are descriptive of the said set of dies; and, if not, then how said dies made by the defendant resembles and how far they differ from the said set of dies described in said figure one of said drawings and in those portions of the said specification of said patent which relates thereto.

Secondly. Whether since July 17th, 1883, and prior to the 10th day of April, 1884, the said defendant has made or caused to
11 be made a die (viz., an upper die and a lower die or two opposing dies) for making dash frames like to the set of dies shown in figure two of the drawing accompanying said letters patent and described in those portions of the printed specifications of said patent which relates to and are descriptive of the last-named set of dies; and, if not, then how said dies made by the defendant resemble and how far they differ from the said set of dies described in said figure two of said drawings and in those portions of the said specification of said patent which relates thereto.

Thirdly. Whether since July 17th, 1883, and prior to April 10th, 1884, the said defendant has, in the city of Cincinnati aforesaid, used in making dash frames or portions of dash frames a die (viz., an upper die and a lower die or two opposing dies) like to the set of dies shown in figure one of the drawing of said patent and described in those portions of the specification which relates to and are descriptive of said set of dies; and, if not, then how said dies used by the defendant resemble and how far they differ from the said set of dies described in said figure and in those portions of the specification of said patent which relate thereto.

12 Fourthly. Whether since July 17, 1883, and prior to April 10th, 1884, the said defendant has, in the city of Cincinnati aforesaid, used in making dash frames or portions of dash frames a die (viz., an upper die and a lower die or two opposing dies) like to the set of dies shown in figure two of the drawing of said patent and described in those portions of the specification which relates to and are descriptive of said set of dies; and, if not, then how said dies used by the defendants in making dash frames or portions thereof resemble and how far they differ from the said set of dies described in said figure two of said drawings and in those portions of the said specification of said patent which relates thereto.

And your orator prays that said defendant, The Active Manufacturing Company, and its servants, agents, attorneys, and workmen, and each and every of them, may be restrained and enjoined, provisionally and perpetually, by the order and injunction of this honorable court, from directly or indirectly making, constructing, using, vending, delivering, working, or putting into practice, opera-

13 ation, or use, or in anywise counterfeiting or imitating the said invention or any part thereof or any die or dies for making dash frames made in accordance therewith or like or similar to those which it has heretofore made; and that the said defendant may be decreed to pay the costs of this suit; and that your orator may have such further relief or such other relief as to this honorable court shall soem meet and as shall be agreeable to equity.

May it please your honors to grant unto your orators the writ of injunction, as well provisional as perpetual, issuing out of and under the seal of this honorable court, commanding, enjoining, and restraining the said defendant, The Active Manufacturing Company, and its servants, agents, attorneys, and workmen, and each and every of them, as is hereinbefore in that behalf prayed.

May it please your honors to grant unto your orator the writ of subpœna, issuing out of and under the seal of this honorable court, directed to the said defendant, The Active Manufacturing Company, commanding it, by a certain day and under a certain
14 penalty, to be and appear in this honorable court, then and there to answer the premises and to stand to and abide such order and decree as may be made against it.

And your orator will ever pray, &c.

GEORGE M. PETERS.

WM. HUBBELL MITCHELL AND
JASON W. FIRESTONE,
Compl't's Sol'r-, and of Counsel.

15 UNITED STATES OF AMERICA,
County of Franklin, Eastern Division of the Southern District of Ohio, } ss:

On this 12th day of April, 1884, before me personally appeared George M. Peters, the above-named complainant, who, being by me first duly sworn, doth depose and say that he has read the foregoing bill of complaint subscribed by him and knows the contents thereof, and that the same is true of his own knowledge, except as to the matters therein stated on information and belief, and as to these matters he believes it to be true.

GEORGE PETERS.

Sworn to by the said George M. Peters and by him subscribed in presence on tis 12th day of April, A. D. 1884.

[SEAL.] W. SCOTT JONES,
Notary Public.

16 And afterward, to wit, but on the day and year last aforesaid, was issued out of the clerk's office of the court aforesaid in this cause our certain subpœna in chancery, directed to the marshal of the district aforesaid and against the said defendant herein, the said The Active Manufacturing Company as aforesaid, and which said subpœna in chancery so as aforesaid issued and directed is clothed in the words and figures as follows, to wit:

Subpœna.

UNITED STATES OF AMERICA, *Southern District of Ohio,* } ss:

The President of the United States of America to the marshal of the southern district of Ohio, Greeting:

You are hereby commanded to summon the Active Manufacturing Company, citizen of and resident in the State of Ohio, if it be found in your district, to be and appear in the circuit court of the United States for the southern district of Ohio aforesaid, at Cincinnati, on the first Monday in July next, to answer a certain bill in chancery filed and exhibited in said court against it by George M. Peters, citizen of and resident in the State of Ohio; hereof you are not to fail under the penalty of the law thence ensuing.

And have you then and there this writ.

Witness the Honorable Morrison R. Waite, Chief Justice
17 of the United States, this twenty-first day of April, A. D. 1884, and in the 108th year of the Independence of the United States of America.

Attest:

[L. S.] WM. C. HOWARD, *Clerk.*

MEMORANDUM.—The said defendant is required to enter its appearance in this suit in the clerk's office of said court on or before the first Monday of June, 1884, otherwise the said bill may be taken *pro confesso.*

WM. C. HOWARD, *Clerk.*

(Endorsed:) $50.00 has been deposited as security for all costs for which the plaintiff may be liable in this suit.

And afterward, to wit, on the 23d day of April, in the year last aforesaid, came the said marshal of the district aforesaid and returned the said the foregoing subpœna into the clerk's office of the court aforesaid, with his proceeding thereon endorsed, clothed in the words and figures as follows, to wit:

Marshal's Return.

Received this writ at Cincinnati, Ohio, on April 21st, 1884, and served the within-named "The Active Manufacturing Company" by handing a true copy hereof, with the endorsements thereon, to
E. W. Brownell, as president, and copy to George Montieth,
18 as secretary and treasurer, of said Active Manufacturing Company (each personally), at Cincinnati, Ohio, on April 22d, 1884.

LOT WRIGHT,
U. S. M., S. D. O.,
By C. E. TWIFORD, *Deputy.*

And afterward, to wit, on the 31st day of May, in the year last aforesaid, the appearance of solicitors for the said defendant aforesaid was made herein in words and figures as follows, to wit:

Appearance of Def't's Solicitors.

United States Circuit Court, Southern District of Ohio. In Equity.

GEORGE M. PETERS
vs.
ACTIVE MANUFACTURING CO. } No-. 3630 & 3631.

William C. Howard, Esq., clerk U. S. circuit court, S. D. O.

SIR: Please enter our appearance for the defendants in the above-entitled causes (Nos. 3630 and 3631.)

Respectfully,
STEM & PECK.

Cincinnati, May 31st, 1884.

And afterward, to wit, on the 21st day of July, in the year last aforesaid, came the said defendant herein, the said The Active Manufacturing Co., as aforesaid, by its said solicitors, the said Stem & Peck as aforesaid, and filed in the said the clerk's office of the
19 court aforesaid in this cause its certain answer to the said bill of complaint so as aforesaid heretofore filed herein, and which said answer so as aforesaid filed is clothed in the words and figures as follows, to wit:

20 *Answer.*

Circuit Court of the United States, Southern District of Ohio. In Equity.

GEORGE M. PETERS
vs.
ACTIVE MANUFACTURING CO. } No. 3630.

The answer of the Active Manufacturing Company, defendant, to the bill of complaint of George M. Peters, complainant.

This respondent, now and at all times hereafter, saving and reserving to itself all and all manner of benefit and advantage of exception that may be had or taken to the manifold errors, uncertainties, and insufficiencies in the said bill of complaint contained, for answer thereto, or to so much and such parts thereof as it is advised it is material or necessary for it to answer, says:

First. It admits that letters patent of the United States for an alleged improvement in dies for making dash frames were issued and delivered to George M. Peters July 17th, 1883, which letters patent were numbered 281,553, but it denies that said alleged improvement was new or useful; denies that it had not been before known and used; denies that it had not been in public use and on sale for more than two years prior to the application of

the said Peters for letters patent; denies that the application
21 for said letters patent was made in due form of law; denies that there was thereby secured to the said Peters, or to his heirs or assigns, the full and exclusive right and liberty of making, using, and vending to others to be used the said alleged invention described in said patent, or any right or rights whatsoever, and avers, upon information and belief, that the said alleged invention had been in public use and on sale in this country for more than two years before the alleged application of Peters for letters patent therefor, and had been abandoned to the public.

Second. It denies that said letters patent are valid, or any rights, exclusive or otherwise, of the said Peters thereunder, and avers that, in view of the state of the art at the date of the alleged invention by the said Peters of said alleged improvements described and claimed in said letters patent, the same were not novel and did not constitute any patentable invention.

Third. It denies, on information and belief, that since the issuing of the said letters patent No. 281,553 the said complainant has invested and expended large sums of money and has been to great trouble in and about said alleged invention, and that the same has been or is of great benefit or advantage, or that great numbers of vehicle dashes have been manufactured by the use of the
22 said invention by the Peters Leather Dash Company and the Columbus Buggy Company, to the great or any advantage to the public, or that the public have generally acknowledged or acquiesced in the alleged and pretended rights of complainant, or that he would have made and realized large gains and profits or any gains and profits from said alleged invention but for the pretended infringement of this respondent.

Fourth. It denies that it has infringed or is infringing said letters patent or any part thereof, or has used or is using or intending to use the alleged patented invention or any material part thereof, or has made or realized any profit or advantage therefrom, or has in any way violated the rights of complainant herein; and it further denies that it has received any notice whatsoever of infringement upon the rights of complainant, as alleged in the bill of complaint.

Fifth. It avers, on information and belief, that the said George M. Peters was not the original and first inventor of the alleged improvements in dies for making dash frames claimed in letters patent No. 281,553 or any material or substantial part thereof; that the same and all material parts thereof had been shown and described
23 in letters patent and printed publications and had been in public use or on sale in this country prior to his alleged invention or discovery thereof.

And, further answering, this defendant says, on information and belief, that the said alleged improvements claimed in letters patent No. 281,553 were described and shown in the following letters patent and printed publications long prior to the alleged invention thereof by the said Peters:

No. 193,236, granted W. N. Fisher July 17th, 1877, forging and welding; No. 221,208, granted Charles H. Babcock Nov. 4th, 1879,

for dies making flap axles; also in a public work entitled "American Mechanical Dictionary," published by Hurd and Houghton in New York in 1877, under the title of "Die," and in various other letters patent and printed publications, the names, numbers, and dates of which this defendant is now endeavoring to ascertain and craves leave to add hereto as soon as discovered.

Sixth. It avers, upon information and belief, that said alleged improvements were for more than two years prior to the alleged application of said Peters for letters patent thereon known to and publicly used in the United States by the following-named
24 persons and at the following-named places, to wit:

At Columbus, Ohio, by the Peters Leather Dash Company and the Columbus Buggy Company, whose places of business are now in said Columbus and who may there be found; at Cincinnati, Ohio, by James Murdock, Jr., F. J. P. Brackett, Simon Ross, Frank Thomas, Herman Bannegarten, Ignatius Hoefle, Jr., Albert M. Dressell, George Block, Gregg G. Wright, and —— Williams, all of whom reside and may now be found at said Cincinnati.

Seventh. It avers that the alleged improvements described and claimed in letters patent No. 281,553 were not new nor invented by the said Peters, but were long prior to the alleged invention thereof by the said Peters known to and publicly used by the following-named persons at the following-named places, to wit:

At Syracuse, New York, by H. J. Burhart, who now resides and may be found at said Syracuse; at Cincinnati, Ohio, by James Murdock, Jr., F. J. P. Brackett, Simon Ross, Frank Thomas, Herman Bennegarten, Ignatius Hoefle, Jr., Albert M. Dressell, George Block, Gregg G. Wright, and —— Williams, all of whom reside and
25 may be found at said Cincinnati, and by many others whose names and places of residence are at present unknown to this defendant, but which it is endeavoring to ascertain and craves leave to add hereto as soon as discovered.

Eighth. It avers that the dies it is now using or others substantially like them were used by this defendant at Cincinnati, Ohio, long prior to the alleged discovery or invention by the said Peters of the dies described and claimed in said letters patent No. 281,553.

Ninth. Defendant says that the same devices and the same combination of devices that are described and claimed in said letters patent, and operating in substantially the same manner, were, long prior to the pretended invention or discovery thereof by the said Peters, old and well known and extensively used in forging and welding and other metal working, and that it required no invention to apply or adapt such old and well-known devices to the form and construction of dash frames, but consisted merely in applying or adapting such old and well-known devices to the making of dash frames, which application or adaptation required no invention or exercise of the inventive faculty on the part of the said
26 Peters; wherefore the said letters patent No. 281,553 were null and void.

Tenth. With respect to the various interrogatories attached to the said bill of complaint, as to whether the defendant has made,

used, or caused to be made or used, between the 17th day of July, 1883, and the 10th day of April, 1884, dies in accordance with the drawings therein referred to, this defendant answers in the negative.

Eleventh. Further answering, defendant insists that complainant is not entitled to the relief prayed for in its said bill of complaint, without which that there is any other matter, cause, or thing in the said bill of complaint contained material or necessary for this defendant to make answer unto, and not hereinbefore sufficiently answered, confessed, or avoided, is true.

All of which matters and things defendant is ready to aver, maintain, and prove as this honorable court may direct, and prays to be hence dismissed with its costs in this behalf sustained.

ACTIVE MANUFACTURING CO.,
Per GEORGE MONTEITH, *Secretary.*

27 STATE OF OHIO, } ss:
County of Hamilton, }

On this 21st day of July, 1884, personally appeared George Monteith, secretary of the Active Manufacturing Company, the within-named respondent, who, being duly sworn, says that he has read the foregoing answer and knows the contents thereof, and that the same are true, except as to the matters therein — on information and belief, and as to these he believes them to be true.

GEO. MONTEITH

Subscribed and sworn to before me this 19th day of July, 1884.
[SEAL.] CHARLES E. BROWN,
Notary Public in and for Hamilton County, Ohio.

28 And afterward, to wit, on the 2d day of September, in the year last aforesaid, came the said complainant herein aforesaid, by his said solicitors aforesaid, and filed in the clerk's office of the court aforesaid in this cause his certain replication to the said the foregoing answer of the said defendant so as aforesaid heretofore filed herein, and which said replication so as aforesaid filed is clothed in the words and figures as follows, to wit:

29 *Replication.*

Circuit Court of the United States, Southern District of Ohio, Western Division. In Equity.

GEO. M. PETERS
vs.
THE ACTIVE MANUFACTURING COMPANY. } No. 3630.

The replication of the above-named complainant to the answer of the above-named respondent.

This repliant saving and reserving to himself, now and at all times hereafter, all and all manner of benefit and advantage of exception

which may be had or taken to the manifold insufficiencies of said answer, for replication thereunto says that he will aver, maintain, and prove his bill of complaint to be true, certain, and sufficient in law to be answered unto, and that the said answer of the said defendant is uncertain, untrue, and insufficient to be replied unto by this repliant, without this, that any other matter or thing whatsoever in the said answer contained material or effectual in the law to be replied unto, and not herein and hereby well and sufficiently replied unto, confessed and avoided, traversed or denied, is
30 true; all which matters and things this repliant is and will be ready to aver, maintain, and prove as this honorable court shall direct, and humbly prays as in and by his said bill he has already prayed.

WM. HUBBELL FISHER AND
JASON W. FIRESTONE,
Solicitors for Complainant.

31 And afterward, to wit, on the second day of December, in the year last aforesaid, came the said complainant herein aforesaid, by his solicitors aforesaid, and filed in the clerk's office of the court aforesaid in this cause certain depositions of sundry persons theretofore taken on behalf of said complainant, and which said depositions so as aforesaid filed are clothed in words and figures as follows, to wit:

32 Circuit Court of the United States for the Southern District of Ohio, Western Division. In Equity.

GEORGE M. PETERS
vs.
ACTIVE MANUFACTURING COMPANY. } No. 3630.

The respondent will take notice that the complainant will examine witnesses in the above-named cause, under the 67th rule in equity, as amended, before Jno. W. Strehli, Esq., notary and special examiner, at the office of Wm. Hubbell Fisher, Esq., at 12 and 13 Wiggins bl'k, Cincinnati, Ohio, on Tuesday, the eighteenth day of November, 1884, beginning said examination at 10 o'clock a. m. of said day and continuing from day to day until completed.

WM. HUBBELL FISHER,
Solicitor for Complainant.

Received copy.
Nov. 15, 1884.

STEM & PECK,
Per RECTOR,
Solicitor- for Respondent.

33 Circuit Court of the United States for the Southern District of Ohio, Western Division. In Equity.

GEORGE M. PETERS
vs.
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Examination of witnesses on behalf of the complainant, under the 67th rule in equity, as amended, pursuant to the annexed notice.

Present: Wm. Hubbell Fisher and Jason W. Firestone, for the complainant, and Chas. M. Peck, for the respondent.

By request of parties, it is ordered that the depositions be taken by question and answer.

RICHARD G. WOOD, a witness produced on behalf of the complainant, being first duly sworn, deposeth and saith, in answer to interrogatories propounded to him by JASON W. FIRESTONE, Esq., of counsel for the complainants, as follows:

Met on November 18th, as per notice attached.
Adjourned to meet to-morrow a. m., November 19th, 1884.
JNO. W. STREHLI,
Notary & Examiner.

Adjourned by consent until to-morrow, November 20th, 1884.
[SEAL.] JNO. W. STREHLI,
Notary & Examiner.

34 The further taking of these depositions is adjourned by consent until Nov. 21st, 1884, — a. m.
JNO. W. STREHLI,
Notary and Examiner.

Nov. 21ST, 1884.

Met pursuant to adjournment.

Present: Same parties.

Ques. 1. State your name, age, residence, and occupation.
Ans. Richard G. Wood; 39 years of age; Cincinnati, Ohio; occupation, machinist, dash-maker, and buggy manufacturer.
Ques. 2. During what number of years does your experience in the above lines extend?
Ans. I was a machinist from 1860 to 1878. From 1878 to 1881 I was in the dash-machine business, and from the fall of 1880 and winter of 1881 made dashes for the Louis Cook Manufacturing Company and others till the summer of 1883, and was with the Active Manufacturing Company part of the winter of 1883 & 1884.
Ques. 3. Where were the Active Manufacturing Company then doing business and has it since been in business at the same place?
Ans. No. 13 Home street, Cincinnati, Ohio, and has since been doing business at the same place.

Ques. 4. What kind of goods does the Active Manufacturing Company make?

35 Ans. Buggy dashes and fenders.

Ques. 5. Have you or not been familiar with the machinery used by it in the manufacture of dashes?

Ans. I am.

Ques. 6. Please state what kind of a device said company used for welding the iron frame of dashes, if any.

Ans. They used a power hammer. Different forms of dies fitted in them. They make what is known as the "lap weld." A variety of sizes and styles are made with "lap-weld" dies. In part, all their welding is done on that principle.

Ques. 7. Describe the kind or kinds of iron said company used in the manufacture of its dashes.

Ans. Their footless dash is made of oval iron, except the lower bar, which is made of channel iron. I believe it is about $\frac{1}{8}$ wide, about $\frac{1}{4}$ thick—the channel rolled down about one-half the thickness, say $\frac{1}{8}$. Their solid foot dashes are made of all oval iron, all over, of different sizes.

Ques. 8. Please describe the kind of dies, if any, you saw in use by said company prior to April 19th, 1884.

Ans. I saw dies used there last fall—October and November, 1883, I think it was—for forging the corners of their footless dashes;

36 also dies for welding the center bar. I saw them in constant use during the spring and summer of 1884. Their corner die was made of steel, consisting of two steel blocks, one upper and one lower. The channel iron and oval iron, which was to be welded together, laid about half way in each block. Projecting tongue extending down from the upper die passed the face of the upper die, so that it struck first or about the same time the bottom of the channel of the lower rail of the dash frame, and as the weld is closed together the tongue prevents the surplus iron from getting down into the channel, and when the weld is completed the web in the channel iron will be wedged down very thin where the slot is to be punched, leaving a smooth, perfect face for the punch to complete the corner. The grooves in the other die, which welds the middle bar, are T-shaped, for both welding the oval and the channel iron. Those are about the form of dies used for making footless dash frames. For making foot dashes the grooves are prepared for oval iron only.

Ques. 9. Can you produce a model illustrating the kind of dies you have been describing as used by the Active Manufacturing Company for welding dash frames for footless dashes? And, if so, please do so.

Ans. Here is about a full-sized model for dies.

Witness here refers to wooden model — the top die with

37 projecting tongue for wedging down slot to be punched, which witness calls "die No. 1," and "die No. 2" is the lower die.

This sample, No. 3, is the oval and channel iron, after it is welded together, showing how projecting tongue of die No. 1 — wedged seat

for slot — to be punched when completed. Model No. 2 shows how dies are held in the hammer and the action of the dies executing the work.

Complainant's counsel now offers in evidence the dies produced by the witness and asks the notary to mark them Complainant's Exhibit No. 1, and also the model showing how the dies are held in the *manner* and asks the notary to mark it Complainant's Exhibit No. 2.

Complainant's counsel now offers in evidence letters patent No. 281,553, dated July 17th, 1883, granted to Geo. M. Peters for improvements in die for making dash frames, and asks the notary to mark it Complainant's Exhibit No. 3.

In answer to cross-interrogatories propounded to him by Mr. CHAS. M. PECK, counsel for respondent, witness answers as follows:

X Ques. 10. How long have you known of lap welding by the use of dies in various kinds of work?

Ans. About 15 years.

X Ques. 11. It is not, then, a new thing, and has not been
38 for the past fifteen years, to your knowledge, to lap weld by the use of dies and a power-pressure hammer?

Ans. For lap welding only, either by hand or power, it is not new—older than I am.

RICHARD G. WOOD.

Sworn to and subscribed before me this 21st day of November, A. D. 1884.

[SEAL.] JNO. W. STREHLI,
Notary Public and Special Examiner, Hamilton County, Ohio.

The further taking of these depositions is adjourned until 2 o'clock for dinner.

JNO. W. STREHLI,
Notary & Examiner.

39 U. S. Circuit Court, Southern Dist. of Ohio, Western Division.
In Equity.

GEO. M. PETERS
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COMPLAINANT'S EXHIBIT No. 3. John W. Strehli, Notary Public & Special Examiner, Hamilton Co., Ohio.

UNITED STATES OF AMERICA.

No. 281,553.

To all to whom these presents shall come:

Whereas George M. Peters, of Columbus, Ohio, has presented to the Commissioner of Patents a petition praying for the grant of let-

ters patent for an alleged new and useful improvement in dies for making dash frames, a description of which invention is contained in the specification, of which a copy is hereunto annexed and made a part hereof, and has complied with the various requirements of law in such cases made and provided; and whereas, upon due examination made, the said claimant is adjudged to be justly entitled to a patent under the law:

Now, therefore, these letters patent are to grant unto the said George M. Peters, his heirs or assigns, for the term of seventeen years from the seventeenth day of July, one thousand eight hundred and eighty-three, the exclusive right to make, use, and vend the said invention throughout the United States and the Territories thereof.

In testimony whereof I have hereunto set my hand and caused the seal of the Patent Office to be affixed, at the city of Washington, this seventeenth day of July, in the year of our Lord one thousand eight hundred and eighty-three, and of the Independence of the United States of America the one hundred and eighth.

[SEAL.] H. M. TELLER,
Secretary of the Interior.

Countersigned:
E. M. MARBLE,
Commissioner of Patents.

40 UNITED STATES PATENT OFFICE.

GEORGE M. PETERS, of Columbus, Ohio.

Die for Making Dash-Frames.

Specification forming part of Letters Patent No. 281,553, dated July 17, 1883; application filed December 7, 1880. (No model.)

To all whom it may concern:

Be it known that I, George M. Peters, of the city of Columbus, in Franklin county, and State of Ohio, have invented certain new and useful improvements in the manufacture of dash-frames, of which the following is a specification:

The principal object of my invention is to provide an efficient and useful method of welding the end bars of a metal dash-frame to the bottom rail, and a method by which the bottom rail of the dash is strengthened at the weld and at the portion of said rail to which the dash-foot is to be attached.

Another object of my invention is to provide a means by which a recess is formed in the bottom rail, preparatory to punching said rail, to receive the bolt or other attachment which secures the dash-foot to the bottom rail, the operation of forming the recess being performed at the same time that the end bar is welded to the bottom rail.

The several features of my invention and the various advantages arising from them, when used together or otherwise, will be hereinafter more fully set forth.

That portion of my invention which relates to dash-frame corners such as can be produced by means hereinafter described is covered by claims which formed a part of this specification, and which now, at the direction of the Hon. Commissioner of Patents, have been transferred to and form part of an application for Letters Patent of which this is a division.

Referring to the drawings forming part of this specification, Figures 1 and 2 represent two different sets of dies for welding the end bar to the bottom rail of a dash-frame. Each of these figures represents the upper and lower die, and also shows the dies placed face to face, as they are when the weld is completed. Figs. 3, 4, and 5 represent different forms in which the end of the end bar may be made and the relative position in which it is placed with reference to the bottom rail of the frame preparatory to welding. Fig. 6 is a view, looking down on one end, of the lower rail, showing its appearance after the end bar has been welded to it by the use of my invention. Fig. 7 represents the lower corner of a dash-frame, showing a recess in the lower rail as made by the use of my invention. Fig. 8 represents a section of the lower rail of a dash with a dash-foot attached, showing a recess in said rail sufficiently wide and deep to receive the nut which secures the dash-foot to the rail.

In Fig. 1, A represents the lower die, and A′ the upper die. In the center of the figure the dies are shown in section, said section being taken through the dotted lines $x\ x$. The dies A and A′ are provided with channels or depressions a to receive the end bar of the frame, and a' to receive the bottom rail. The channels a and a' of the die A coincide with the like channels in the die A′ when the two dies are placed together, as in the center of Fig. 1.

From the bottom of the depressions a' in the dies A and A′ rise the tongues a^2, which, like the depressions a, coincide with each other when the two dies are placed together. These tongues a^2 preferably do not rise quite to the level of the face of the dies, so that when the dies are placed together a slight space will be left between the two tongues, as shown.

I preferably so form the tongues a^2 that when the dies A and A′ are placed together said tongues will approach closer to each other at that portion of themselves which forms that portion of the web in the lower bar which is to be punched through to receive the bolt or other device whereby the dash-frame is connected to the foot or vehicle, than at any other point. The object of such a formation of the tongues is to make the web left in the bottom rail thinner in that portion of said rail where perforations are to be made to receive the bolts which secure the dash-foot to the frame, substantially as shown by the dotted lines in Fig. 6, this web being in other portions preferably left of a uniform thickness. One of the objects of thus maikng the web thin, as described, is to enable it to be more readily punched or otherwise perforated. By means of these dies a recess is formed in either side of the bottom rail, which recess corresponds with the tongues a^2 of the dies. Fig. 2 represents a slightly-different form of dies, B representing the lower die, and B′ the upper die, the two dies being placed face to face, and shown in section in

the middle of the figure, said section being taken through
41 the lines *y y*. The die B′ is formed like the die A′, having the depressions *b b′*, corresponding to the depressions *a* and *a′*, with the exception that the tongue b^2, springing from the bottom of depression *b′*, and corresponding to the tongue a^2, projects slightly beyond the face of the die B′.

The die B has the depressions *b b′*, which correspond to the depressions *a a′* of the die A, and which coincide with the like depressions in the die B′ when the two dies are placed together, as in the center of Fig. 2. The depression *b′* in the die B is not provided with a tongue, as is the case with the depression *a′*, but in all other respects the die B is like the die A. By means of the dies B and B′ a recess is formed in one side of the bottom rail of the dash-frame corresponding to the tongue b^2 of the die B′; but the die B having no corresponding tongue, no recess is formed in the side of the bottom rail against which the die B presses, as will be obvious from the sectional view in Fig. 2.

In some instances it will be desirable to make the tongue b^2 or tongue a^2 proportionately broader than is shown in Fig. 2, in order to form the recess in the bottom rail of the frame sufficiently wide to receive the nut into which the bolt which secures the dash-foot to the frame is secured, as illustrated in Fig. 8, in which figure C represents the bottom rail of the dash-frame; D, the dash-foot; *d*, the bolt which secures the foot to the frame, and *d′* the nut into which said bolt is screwed.

Instead of the continuous tongues a^2 b^2, a row or series of studs may be used to form a number of smaller recesses which may be readily converted into perforations to receive the bolt which secures the dash-foot to the frame; but this latter construction is not so desirable as the continuous tongue, for the reason that where studs instead of a tongue are used perforations can only be made at definite points, and the lateral adjustability of the foot will not be so perfect as it is when the continuous tongue is used, as by the use of the latter perforations can be made at any point in the recess formed by said tongue. Another reason why a continuous tongue is preferable to such studs is because the latter are liable to be more rapidly worn down in use than the tongue. If a continuous tongue be imployed, it need not necessarily be so long as is herein described, but its length may be varied to suit the manufacturer. These tongues may, if desired, be made of such a shape as to form a recess with a concave bottom, instead of the shape herein described.

When the end bar is to be welded to the bottom rail, it (the end bar) may be left straight, as shown in Fig. 3; but I preferably bend the lower end of the end bar, as shown in Figs. 4 and 5, before welding, in order to have more metal at the point of unison, and also that the grain of the end of the end bar may run parallel to the grain of the bottom rail, thereby securing a more perfect weld. By the use of my invention this surplus metal is forced to the upper and lower side of the recess formed by the tongue a^2 or b^2, thickening the bottom rail at these points, as shown in Fig. 6, and strengthening it at the point where most strength is needed—viz., at the point of weld-

ing—and the portion to which the dash-foot is to be attached. I am thereby enabled to use a much lighter bottom rail and throughout the balance of the frame than I otherwise could do. To enable this bottom rail to be thickened at the points above mentioned, the bottoms of the recesses a' and b' in the dies are preferably deepened toward and at the point where they respectively meet the vertical recesses a and b. The bottom rail, previous to the welding to it of the end bar, may be either a round or oval bar, or of any desirable shape, or a plain bar without channel, as in Fig. 3, or a bar channeled on both sides, as in Fig. 4, or channeled on one side only, as in Fig. 5, in either of which cases the corner of the frame will present the appearance represented in Figs. 6 and 7, or any similar or other special form desired, if the dies are so made, having a recess on one or both sides of the lower rail, according as the dies B B′ or A A′ are used. If the lower rail to be used is channeled on one or both sides previous to welding, the tongue a^2 or b^2 will not permit the channel to be obliterated wholly or partially when the end bar is welded to the bottom rail; but, as before stated, the surplus metal obtained by the lap, or, if the tongue is placed so far away from the lap as not to touch it, from the metal pressed out by the tongue as it penetrates or sinks into the bar, is forced to the upper and lower sides of the channel. When the end bar and bottom rail are to be welded together, the ends of both are brought to the required degree of heat and placed between the dies, which are then brought forcibly together, which welds the two ends together and forms the recess in one or both sides of the bottom rail, as before stated, at one operation.

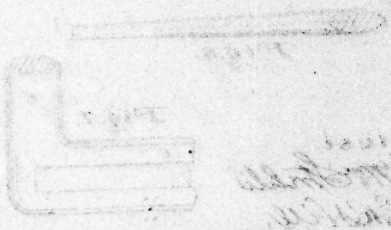
Should the manufacturer desire, he may place the tongue a^2 so far away from the point of welding that none of the surplus metal of the lap will be pressed into the lower rail at the sides of the depression made by the tongue; yet if the part, where the depression or channel is to be made be located near enough to the end of the lower rail where the weld is to be made, to be heated at the same heat with which the weld is to be made, the tongue would be of value in forming a channel, or in preserving a channel already formed, in the lower rail, and in reducing the thickness of the web in the lower rail, where the perforations are expected to be made.

What I claim as new and of my invention, and desire to secure by letters patent, is—

1. The combination, substantially as before set forth, of the two dies having opposing angularly-joined depressions a a', and a tongue, a^2, in the depression a' of either or both dies.

2. The combination, substantially as before set forth, of the two dies having opposing angularly-joined depressions a a', and
42 a tongue a^2, in the depression a^2 of either or both dies, the depressions a' deepening toward their junctions with the depressions a.

3. The combination, substantially as before set forth, of the dies having opposing angularly-joined depressions a a', and a tongue, a^2, in either or both of the said depressions, the face of said tongue or tongues being inclined.



(No Model.) 43

G. M. PETERS.

DIE FOR MAKING DASH FRAMES.

No. 281,553. No. 254. Peters N. W. Co. p. 43 Patented July 17, 1883.

Fig. 1.

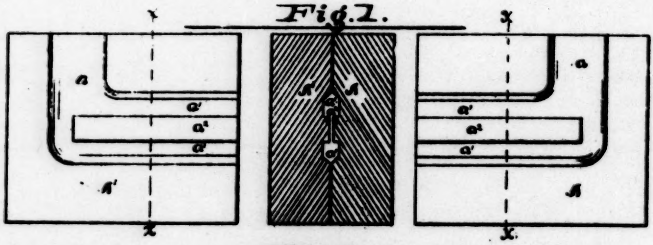
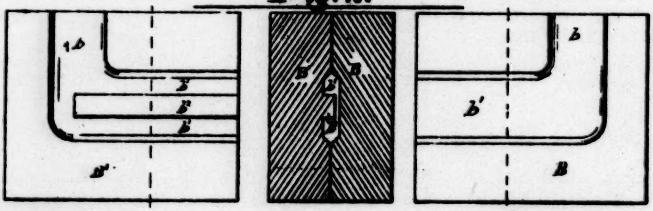


Fig. 2.



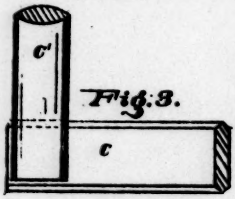


Fig. 3.

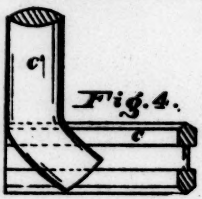


Fig. 4.

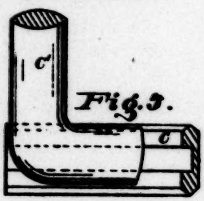


Fig. 5.

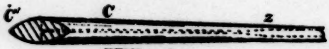


Fig. 6.

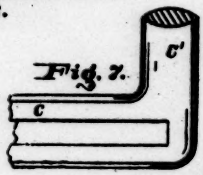


Fig. 7.

Fig. 8.

Witnesses.
J. McStubbs
E. K. Hill.

Inventor.
George M. Peters
per Wm. Hubbell Fisher
Atty.

4. The combination, substantially as before set forth, of the dies having opposing angularly-joined depressions a a', and a tongue, a^2, in either or both of the said depressions, the depressions a' deepening toward their junctions with the depressions a, and the face of the tongue or tongues being inclined.

GEORGE M. PETERS.

Witnesses:
A. S. LUDLOW.
E. R. HILL.

(Here follows diagram marked p. 43.)

44 STATE OF OHIO, } ss:
County of Hamilton, }

I, John W. Strehli, a notary public within and for said county, selected to act as special examiner, under the 67th rule in equity, as amended, in the cause stated in the caption, do hereby certify that the foregoing examination was had pursuant to the annexed notice, at the office of Wm. Hubbell Fisher, Esq., rooms 12 and 13 Wiggins' Block, Cincinnati, Ohio, on November 18th to Nov. 21st, 1884.

I further certify that at the said time and place I was attended by Richard G. Wood, witness produced on behalf of the complainant, he being of sound mind and lawful age, and the said witness being, previously to the commencement of his deposition, by me duly cautioned and solemnly sworn to testify the truth, the whole truth, and nothing but the truth, and the deposition hereinbefore appearing was by me reduced to writing in the presence of and read over by me to said witness, and was thereupon subscribed by said Richard G. Wood in my presence.

I further certify that I am not of counsel nor attorney nor relative of either of the parties to this cause, nor in any manner interested in the result thereof.

45 In testimony whereof I have hereunto set my hand and affixed my seal of office this 21st day of November, 1884.

[SEAL.] JOHN W. STREHLI,
Examiner and Notary Public, Hamilton County, Ohio.

Costs:

Notary fee	2 90
Witness	2 50
	$5 40

46 Circuit Court of the United States for the Southern District of Ohio, Western Division. In Equity.

GEO. M. PETERS
vs. } 3630.
THE ACTIVE MANUFACTURING COMPANY.

The respondent will take notice that the complainant will exam-

ine witnesses in the above-named cause, under the 67th rule in equity, as amended, before Jno. W. Strehli, Esq., notary and special examiner, at the office of Wm. Hubbell Fisher, Esq., # 12 & 13 Wiggins' Bl'k, Cincinnati, Ohio, on Friday, the 28th day of November, 1884, beginning said examination at 10 o'clock a. m. of said day and continuing from day to day until completed.

WM. HUBBELL FISHER,
Solicitor for Complainant.

Received copy.
Nov. 25, 1884.

STEM & PECK,
Per RECTOR,
Solicitor for Respondent.

47 Circuit Court of the United States for the Southern District of Ohio, Western Division. In Equity.

GEO. M. PETERS
vs.
THE ACTIVE MANUFACTURING COMPANY. } No. 3630.

Examination of witnesses on behalf of the complainant, under the 67th rule in equity, as amended, pursuant to the annexed notice.

Present: Wm. Hubbell Fisher and Jason W. Firestone, for the complainant, and Arthur Stem, for the respondent.

By request of parties, it is ordered that the depositions be taken by question and answer.

JOHN MESTEL, a witness produced on behalf of the complainant, being first duly sworn, deposeth and saith, in answer to interrogatories propounded to him by Jason W. Firestone, Esq., of counsel for the complainant, as follows:

Question 1. State your name, age, residence, and occupation.

Answer. My name is John Mestel; age, 23 years; 133 Charlotte St.; occupation, cleaning castings.

Ques. 2. State whether or not you ever worked for the Active Manufacturing Company of Cincinnati, Ohio.

48 Ans. Yes, sir.

Ques. 3. While in its employ what did you do?

Ans. Straightening dash frames when I first commenced to work there. Then I was a helper on the hammer in welding dash frames.

Ques. 4. What kind of a hammer did they use?

Ans. Steam hammer, with dies to make the weld in dash frames.

Ques. 5. When did you commence helping to make these welds?

Ans. About two years ago I commenced helping to run the hammer, and after that I ran the hammer myself and had a helper.

Ques. 6. Please describe the dies used in the hammer by the Active Manufacturing Company, and in so doing you may refer to any of the models already offered in evidence in this case.

Ans. There was an upper and lower die, each with a groove to receive the dash corner, and the top and lower dies each had a tongue like the tongue shown in Compl't's Exhibit No. 2, to which witness refers.

Ques. 7. When did you quit working for the Active Manufacturing Company?

Ans. Last day I worked there was the 3d of July, 1884.

In answer to cross-interrogatories propounded to him by
49 ARTHUR STEM, Esq., counsel for respondents, witness answers as follows:

X Ques. 8. Where and how were you employed before you entered the employ of the Active Manufacturing Company?

Ans. I worked at Simmonds' carriage factory—putting on springs and putting gearings together.

X Ques. 9. Were you ever employed in iron working or welding before you worked for the Active M'f'g Co.?

Ans. I worked just as I said—down at Simmonds'.

X Ques. 10. Did you do any welding anywhere before that time?

Ans. No, sir.

CIN'TI, OHIO, *Nov.* 28, '84.

The witness refused to sign his deposition.

[SEAL.] JNO. W. STREHLI,
Notary & Examiner, Hamilton County, Ohio.

50 JOHN DOYLE, a witness produced in behalf of complainants, being first duly sworn, in answer to interrogatories propounded to him by JASON W. FIRESTONE, answers as follows:

Ques. 1. State your name, age, residence, and occupation.

Ans. My name is John Doyle; residence, 302 W. 5th street; age, 22 years old; occupation, making hat-racks.

Ques. 2. State whether or not you ever worked for the Active Manufacturing Company of Cincinnati, Ohio.

Ans. I have.

Ques. 3. What did you do?

Ans. I straightened carriage dash frames.

Ques. 4. When did you quit working for said company?

Ans. Last August a year ago—about that time.

Ques. 5. While working for the said company did you or not ever see it work—men using a hammer with dies for welding the corner irons of dash frames?

Ans. Yes, sir.

Ques. 6. Please describe the kind of dies used by said workmen in welding the corner-irons of dash frames, and in so doing
51 you may refer to any of the models in evidence in this case.

Ans. This is the kind of dies witness refers to, Complainant's Exhibit No. 2, the lower die also having a tongue like the upper die, as shown in part No. 1 of said exhibit. The tongue, however, comes out flush with the side of the die, and also comes out flush with the

channel in the die which receives the oval iron of the dash-frame. Witness here refers to the point which I have indicated by an ink line on said model (part No. 1).

[SEAL.] JNO. W. STREHLI,
Not'y & Examiner.

Ques. 7. When did you commence working for the Active Manufacturing Company?

Ans. In the year 1881, in the month of March.

Ques. 8. How soon after you commenced working there did you know of those dies being used there?

Ans. I noticed them all the time while I worked there.

In answer to cross-interrogatories propounded to him by Mr. ARTHUR STEM, the witness answers as follows:

X Ques. 9. The dies used there, then, were not exactly like this wooden mode-, Comp't's Exhibit No. 1?

Ans. Not exactly like it.

52 X Ques. 10. Did they use different forms of dies?

Ans. No, sir; that is all the kind I saw.

JOHN DOYLE.

Sworn to before me and subscribed in my presence this 28th day of November, A. D. 1884.

[SEAL.] JNO. W. STREHLI,
Notary Public and Special Examiner, Hamilton County, Ohio.

53 STATE OF OHIO, *County of Hamilton,* } ss:

I, John W. Strehli, a notary public within and for said county, selected to act as special examiner, under the 67th rule in equity, as amended, in the cause stated in the caption, do hereby certify that the foregoing examination was had, pursuant to the annexed notice, — # 12 & 13 Wiggins' Bl'k, Cincinnati, Ohio, being the offices of Wm. Hubbell Fisher, on Friday morning, November 28th, 1884.

I further certify that at the said time and place I was attended by John Doyle and John Mestel, witnesses produced on behalf of the complainant, they being of sound mind and lawful age, and the said witnesses were, previously to the commencement of their depositions, by me first duly cautioned and solemnly sworn to testify the truth, the whole truth, and nothing but the truth, and the depositions hereinbefore appearing were by me reduced to writing in the presence of and read over by me to said witnesses, and the deposition of said John Doyle was thereupon subscribed by him in my presence, but the said John Mestel refused to sign his deposition.

I further certify that I am not of counsel nor attorney nor relative of either of the parties to this cause, nor in any manner
54 interested in the result thereof.

In testimony whereof I have hereunto set my hand and affixed my seal of office this 28th day of November, 1884.

[SEAL.] JNO. W. STREHLI,
Special Examiner & Notary Public, Hamilton County, Ohio.

Costs:

Notary fee	2 25
Witnesses	2 50
	2 50
	$7 25

55 And afterward, to wit, on the 19th day of December, in the year last aforesaid, an entry was made upon the journal of the court aforesaid in this cause, and which said entry so as aforesaid made is clothed in the words and figures as follows, to wit:

GEORGE M. PETERS
vs.
THE ACTIVE MANUFACTURING CO. } In Equity. 3630.

This day this cause came on to be heard upon application of complainant for further time to take his testimony, and the court being advised in the premises, doth grant complainant twenty days additional time from this day in which to take his testimony.

56 And afterward, to wit, on the 31st day of January, A. D. 1885, came the said complainant herein aforesaid, by his said solicitors aforesaid, and filed in the clerk's office of the court aforesaid in this cause certain depositions theretofore taken on his behalf, and which said depositions so as aforesaid filed are in the words and figures clothed as follows, to wit:

57 Circuit Court of the United States for the Southern District of Ohio, Western Division. In Equity.

GEORGE M. PETERS
vs.
THE ACTIVE MANUFACTURING COMPANY. } No. 3630.

The respondent will take notice that the complainant will examine witnesses in the above-named cause, under the 67th rule in equity, as amended, before Ira H. Crum, Esq., notary and special examiner, at the office of Jason W. Firestone, No. 85 South High street, Columbus, Ohio, on Tuesday, the thirtieth day of December, 1884, beginning said examination at ten o'clock a. m. of said day and continuing from day to day until completed.

WM. HUBBELL FISHER AND
J. W. FIRESTONE,
Solicitors for Complainant.

Received copy Dec'r 26, 1885, Cincinnati, O.

STEM & PECK,
Solicitor for Respondent.

58 Circuit Court of the United States for the Southern District of Ohio, Western Division. In Equity.

GEORGE M. PETERS
vs.
THE ACTIVE MANUFACTURING COMPANY. } No. 3630.

Examination of witnesses on behalf of the complainant, under the 67th rule in equity, as amended, pursuant to the annexed notice.

Present: Jason W. Firestone, for the complainant, and —— ——, for the respondent.

By request of parties, it is ordered that the depositions be taken by question and answer.

FRED. WEADON, a witness produced on behalf of the complainant, being first duly sworn, deposeth and saith, in answer to interrogatories propounded to him by JASON W. FIRESTONE, Esq., of counsel for the complainant, as follows:

Ques. 1. State your name, age, residence, and occupation.

Ans. Fred. Weadon; age, forty-five; superintendent of machine shop and machinery for the Peters Dash Company at Columbus, Ohio.

Ques. 2. Who compose the firm of the Peters Dash Company?

59 Ans. As far as I know, George M. Peters, C. D. Firestone, and O. C. Peters.

Q. 3. What business are the Peters Dash Company engaged in, and where is their factory located?

Ans. They are engaged in manufacturing iron frames, leather-covered dashes, and also buggies, at Columbus, Ohio.

Q. 4. Are you familiar with the kind of machinery and devices used by the said company in making the iron frames for their leather-covered dashes?

Ans. Yes, sir; I am.

Q. 5. Please describe the kind of dies used by said company in the construction of their dashes.

A. The dies are made of blocks of steel, with tongues in the impressions; in some dies one tongue and in some two tongues; one tongue in the upper die block and one in the lower, where two tongues are used; where but one tongue is used it is formed in the upper die block.

Q. 6. What shape of iron do said company use in the manufacture of their dashes?

A. The dashes, when constructed, are composed of top and side rails, which are made of oval iron, and the bottom rail of the frame is made out of what is known as channel iron—that is, iron with side walls connected by a thin web in the centre; this iron is

60 channeled on both sides.

Q. 7. Can you produce an iron frame dash; and, if so, please do so.

A. I can; here is the iron frame called for in the question.

(Complainant's counsel now offered in evidence the frame produced by the witness and asks examiner to mark it Weadon's Exhibit; which is done accordingly.

IRA H. CRUM,
Notary and Examiner.

Q. 8. Please examine Complainant's Exhibit Number Three, the same being the patent sued on in this case, and I call your attention particularly to the figures number one and two in the drawing thereof, and state how far, if at all, said figures illustrate the kind of dies in use by said company.

Ans. I have examined the drawings called for by the question, and, as I understand them, the dies used by the said company are exactly like the dies illustrated by the figures No. 1 and 2 of the drawing and the same as I have heretofore attempted to describe.

Q. 9. In practical operation, what use and advantage do you
61 find in the construction of the dies you have described and referred to in making the welds of dash frames?

Ans. As I have before stated, the lower bar is constructed of channel iron, the walls constructed by a thin web of metal, and this channel iron is used so that after the dash is constructed, and either before or after the iron frame is covered with leather, the lower rail or channel bar can be easily perforated in the channel part so as to receive a bolt for the purpose of attaching a separable dash foot to the dash frame. The dies thus formed close around the walls of this channel bar in making the weld, and the tongue of the die fits into the channel between the walls and prevents the hot metal from filling the channel, and thus preserves the iron and the web in its normal shape, so that it can be readily punched, and thus prevents the metal from flowing in and makes a perfect weld, and will prevent the channel from being obliterated, and the surplus iron is forced out toward the edges or thick portions where the weld is made, thus compacting the metal at the thick ends, making a much better weld than could be made without the use of the tongue, for if the tongue in the die were not used the metal would fill the channel and prevent punching and also flow away from the cor-
62 ner where weld is made, and then, owing to scarcity of metal, would make an imperfect weld.

Q. 10. Is George M. Peters, the patentee named in Complainant's Exhibit Number Three, the same George M. Peters referred to by you as being a member of the firm of the Peters Dash Company?

A. Yes, sir; he is the same person.

Q. 11. Do you know of anything else of interest or importance to either of the parties to this suit; and, if so, state fully anything you desire to add.

Ans. I know of nothing further in regard to this suit.

FRED. WEADON.

63 Also EDWIN H. MOONEY, of lawful age, a witness produced on behalf of the complainant, being first duly sworn, deposes as follows:

Q. 1. State your name, age, residence, and occupation.

A. My name is Edwin H. Mooney; my age is twenty-seven years; my residence is Columbus, Ohio; I am by occupation a dash-maker, and was for many years last past foreman in the dash-finishing department of the Peters Dash Company.

Q. 2. Are you familiar with the kinds of machinery used by the said company in the manufacture of dashes?

Ans. I am.

Q. 3. Please examine Complainant's Exhibit Number Three, being the patent sued on in this case, and especially figures one and two of the drawings thereof, and state what device said drawings represent?

Ans. I have examined the drawings in the exhibit referred to in the question and, as I understand them, they correctly illustrate the dies used by the Peters Dash Company in making the welds of their iron-framed dashes.

64 Q. 4. State, if you know, when the Peters Dash Company first commenced using the dies illustrated by the drawings referred to.

Ans. The dies were invented by Mr. George M. Peters about January, 1879, and soon thereafter they were put in practical operation in the factory of the Peters Dash Company, and have been in constant and practical use ever since.

Q. 5. State, if you know, how many dashes the Peters Dash Company have made by using the dies aforesaid?

Ans. They have manufactured, in round numbers, about seven hundred thousand (700,000).

Q. 6. Do you know anything else of interest or importance to either of the parties to this suit? And, if so, state fully anything you may desire to add.

Ans. I know of nothing further.

EDWIN H. MOONEY.

65 STATE OF OHIO, } ss:
County of Franklin, }

I, Ira H. Crum, a notary public within and for said county, selected to act as special examiner under the 67th rule in equity, as amended, in the cause stated in the caption, do hereby certify that the foregoing examination was had, pursuant to the annexed notice, at the office of Jason W. Firestone, No. 85 South High street, Columbus, Ohio, on Tuesday, the thirtieth day of December, 1884.

I further certify that at the said time and place I was attended by Fred. Weadon and Edwin H. Mooney, witnesses produced on behalf of the complainant, they being of sound mind and lawful age, and the said witnesses being, previously to the commencement of their depositions, by me duly cautioned and solemnly sworn to testify the truth, the whole truth, and nothing but the truth, and the depositions hereinbefore appearing being by me reduced to writing in the presence of and read over by me to said witnesses, and being thereupon subscribed by them in my presence.

66 I further certify that I am not of counsel, nor attorney, nor relative of either of the parties to this cause, nor in any manner interested in the result thereof.

In testimony whereof I have hereunto set my hand and affixed my seal of office this 30th day of December, 1884.

[SEAL.] IRA H. CRUM,
Notary Public and Special Examiner.

Fees:

Notary fees	$6 00
Witness fees:	
Fred. Weadon	1 50
Edwin H. Mooney	1 50
Total fees	9 00

[SEAL.] IRA H. CRUM,
Notary Public and Special Examiner.

67 And on, to wit, the 22d day of January, in the year last aforesaid, came the said defendant herein aforesaid, by its said solicitors aforesaid, and filed in the clerk's office of the court aforesaid certain depositions heretofore taken on its behalf in this cause, and which said depositions so as aforesaid filed are in the words and figures as follows, to wit:

68 Circuit Court of the United States for the Southern District of Ohio. In Equity.

GEO. M. PETERS
vs.
ACTIVE M'F'G CO. } No. 3630.

Examination of witnesses on behalf of the defendant, under the 67th rule in equity, as amended, before Edward W. Rector, who is hereby agreed upon as special examiner under said rule, at Cincinnati, Ohio, this 16th day of Jan'y, 1885.

Present: Wm. Hubbell Fisher, Esq., of counsel for the complainant, and Arthur Stem, Esq., of counsel for the defendant.

By request of parties, it is ordered that these depositions be taken by question and answer.

F. J. P. BRACKETT, a witness produced on behalf of the defendant, being first duly sworn, deposeth and saith, in answer to interrogatories propounded to him by ARTHUR STEM, Esq., of counsel for the defendant, as follows:

Question 1. State your name, age, residence, and occupation.

Answer. F. J. P. Brackett; age, 36; residence, Covington, Ky.; occupation, sup't of Lomas Forges Bridge Works, manufacturers of iron bridges and all class of iron work.

69 Q. 2. How long have you been engaged in that class of business?

Ans. More or less, since 1868.

Q. 3. Is it customary in your business to forge together pieces of iron of different shape in such a way as to preserve the shape of each or either at the point of connection?

Ans. Yes, sir; it is.

Q. 4. Can you mention some of the different shapes that it is customary to weld together in such a way that the shape at each or either is preserved?

Ans. Rounds to half rounds; flats to flats; rounds to squares; ovals to flats; channels to rounds—in fact, the shape of the iron does not hinder or prevent their being forged together either in a straight line or at an angle, and almost, if not all, shapes are joined to each other either at an angle or in a straight line or in curves.

Q. 5. How is this usually done?

Ans. It is usually formed by welding in dies or otherwise, but is sometimes formed or joined together by splice or when a temporary connection is made.

Q. 6. How are dies for this purpose usually secured?

Ans. Any ordinary die-sinker can form them upon instruction of what is required.

Q. 7. I now show you letters patent No. 281,553, granted
70 Geo. M. Peters July 17, 1883, and ask you whether there is anything moore as requiring invention in the construction of the dies therein described and claimed.

Counsel for complainants object to that fact of the foregoing question, which calls for the opinion of the witness as to the question of invention.

Ans. I should think not, because the dies are formed or sunk the same as any other dies would be to form any other shapes at right angles, save the difference in the shape of the die required for the difference in the shape of the material used.

Q. 8. In welding channelled iron to other forms of iron, how is the channel usually preserved?

Ans. By a form or die made to the shape of the channel, by having hollow places or recesses cut to receive the flanges and high flue or tongue to form the web on the thin part of the channel.

Ques. 9. How long, to your knowledge, has it been customary to weld channel iron to other forms of iron by means of dies provided with recesses and tongues?

Ans. I should say, from memory, about eight or ten years.

Ques. 10. Is there anything *moved* in welding two such pieces of iron together at an angle?

Ans. No, sir; no more so than welding an oval to a round
71 or other form of iron at an angle, or two flat pieces.

Q. 11. Supposing you had occasion to weld together at an angle two such pieces of iron as are now shown you and marked Defendant's Exhibits "A" and "B," which are now offered in evidence, would there be any difficulty or would it require any invention to

make dies for the purpose so as to preserve the channel at the point of juncture of the two pieces, either in a straight line or at an angle?

Counsel for complain-ts objects to question as incompetent.

Ans. I should say not. If the two pieces were brought to us at our shop we could weld them without destroying their shape.

Q. 12. Could any die-sinker, under the circumstances, construct such dies as defendant's Exhibit "C," now offered in evidence?

Ans. I should say so.

Ques. 13. How long has channelled iron been in common use, to your knowledge, for mechanical purposes?

Ans. Fifteen years or more, I should say, from memory.

Q. 14. Has it ever, within your memory, been considered either novel or particularly ingenious to construct dies adapted to weld together pieces of channelled iron and pieces of different shapes?

Objected to as irrelevant.

Ans. No, sir.

72 Cross-examined by Mr. FISHER, of counsel for complainant:

X Q. 15. How long have you been employed by the Lomas Forge and Bridge Work?

Ans. About five years.

X Q. 16. What did you do before you worked for the Lomas Forge Bridge Works?

Ans. I worked for the Cincinnati Bridge Company; the Clinton Smith Bridge Company, Clinton, Iowa; Chicago Iron Bridge Works, Chicago; Boston and Albany railroad, and others.

X Q. 17. Please mention the others referred to in our last answer.

Ans. Steam Plow Works of Farmington, Illinois.

X Q. 18. What kind of work did you do for the Boston and Albany railroad?

Ans. I worked in the master mechanic's office and also in the shop; served my time there as a machinist.

X Q. 19. What class of forging does the Lomas Bridge Company do?

Ans. A great many different classes, both heavy and light, and a great amount of die forging.

X Q. 20. Is the work the said company does what is known as hammer forging?

Ans. Yes, sir; both hammer and pressed forging.

X Q. 21. Do you mean to say that you have seen the dies described in patent 211,553 before you testified in this suit?

73 Ans. No, sir; not those particular dies.

X Q. 22. Have you ever seen any dies just like those described in this patent?

7 Ans. No, sir; not exactly like those described in this patent.

X Q. 23. Have you ever been engaged in the manufacture of carriages or in the carriage business?

Ans. No, sir; but have made considerable amount of dies for

making carriage forgings; have made of four shape some few special forgings.

X Q. 24. When did you first begin to make these special forgings?

Ans. About four or five years ago; the exact time I could not state from memory.

X Q. 25. Did you make the die marked Defendant's Exhibit "C" in this suit?

Ans. No, sir.

X Q. 26. Did you or your company ever make any dies for the Active Manufacturing Company?

8 Ans. I think we have.

X Q 27. About how long ago did you or your company begin making dies for the Active Company?

Ans. I could not answer this question without reference to the books, as the dies we made for the Active Company were very few, and it has been a long time since we made any for them; have not made any this last year I know.

X Ques. 28. Those questions and answers in the foregoing
74 testimony which relate to whether there is invention in the devices described in and covered by letters patent 281,553 are objected to as incompetent and immaterial.

Redirect examination by Mr. STEM:

Q. 28. What do you mean by "not exactly like those," in answer to Ques. 22?

A. I gave that answer because it would be impossible for me to see dies exactly like those unless they were used for exactly the same works.

Q. 29. Have you seen dies similar to those shown in the patent—that is, with angular depressions and tongues of various shapes? By similar I do not mean exactly like them, but for welding channelled iron.

Ans. I have used dies for welding round iron to channelled iron, but not in exactly the same form as that.

Q. 30. Were the dies constructed with a tongue to preserve the channel in the iron; and how long since you used them?

Ans. About five or six years; they were constructed to save the shape of the channel.

Recross-examination:

X Q. 31. Now, Mr. Brackett, describe the dies you say you have used and which you referred to in you last answer and in your answer to question 29, and state the purpose for which they were used.

Ans. They were used for the purpose of welding a screw
75 end on the end of a channel, and were made in the form of the channel, and were used by a blacksmith on an anvil. A bottom die was placed in the hole of the anvil and a top die was held by a smith; on account of two pieces used at a time it was done in this way.

X Q. 32. Describe the difference between these dies described in your last answer and those shown in complainant's patent, 281,553.

Ans. One was made for forming at a right angle, the other in a straight line; the one in the patent for an angle and the other in a straight line. The patent is for a double channel, and necessarily the shapes were different.

X Q. 33. For what purpose was the article or thing produced by the dies which you saw used, as mentioned in Ques. 30? And if it has any technical name in the arts please give us that name.

Ans. It was used as an upright or strut in an arched bridge.

X Q. 34. Give the name of the blacksmith or blacksmiths who used these dies and their present residences.

Ans. That would be an impossibility for me to do, as I don't remember.

X Q. 35. Why cannot you remember?

Ans. Because the firm is defunct and the workmen are
76 gone, and I don't remember anything about it beyond that they were used; that is all I remember about it.

X Q. 36. In what shop and where located were these dies used?

Ans. Used at Clinton, Iowa; by the way, that isn't where they were used, they were used at the Cincinnati Bridge Company. The above statements as regards these dies are made only from memory, as I made the drawings for the work, and have not a distinct recollection of the exact location or when, only that they were used.

F. J. P. BRACKETT.

Counsel for defendant offers in evidence certified copies of the file wrappers and contents of patent No. 281,553 and marks the same "Defendant's Exhibit Patent File."

77 And on, to wit, the 25th day of June, in the year last aforesaid, came the said respondent herein aforesaid, by its said solicitors aforesaid, and filed in the said the clerk's office of the court aforesaid in this cause it- certain exhibit, Respondent's "Patent File," and which said exhibit so as aforesaid filed is clothed in words and figures as follows, to wit:

RESPONDENT'S EXHIBIT "RESPONDENT'S PATENT FILE.

DEPARTMENT OF THE INTERIOR,
UNITED STATES PATENT OFFICE.

To all persons to whom these presents shall come, Greeting

This is to certify that the annexed is a true copy from the files of this office of the file wrapper and contents in the matter of the letters patent granted George M. Peters July 17th, 1883, number 281,553, for improvement in die for making dash frames.

In testimony whereof I, Benj, Butterworth, Commissioner of Patents, have caused the seal of the Patent Office to be affixed this 12th day of January, in the year of our Lord one thousand eight hundred and eighty-five, and of the Independence of the United States the one hundred and ninth.

[L. S.] (Signed) BENJ. BUTTERWORTH,
Commissioner.

78 $15 ch'k. CINCINNATI, O., *Dec. 4th*, 1880.

To Commissioner of Patents, Washington, D. C.

DEAR SIR: Enclosed please find draft No. 10780, Franklin Bank of Cincinnati, on Bank of America, New York, for fifteen (15) dollars, being first Government fee, payable on filing appli'n of George M. Peters for letters patent for imp't in the manufacture of dash frames.

Acknowledge receipt & oblige yours, &c.,

WM. HUBBELL FISHER,
Per S.

[Endorsed:] $\frac{24}{320}$. U. S. Patent Office, Dec. 6, 1880.

79 CINCINNATI, O., *Dec. 4th*, 1880.

To Commissioner of Patents, Washington, D. C.

DEAR SIR: Enclosed please find petition, power of attorney, specification, oath, and drawing in the matter of the application of George M. Peters for letters patent for improvement in the manufacture of dash frames.

Please file, acknowledge receipt, and oblige, yours truly,

WM. HUBBELL FISHER,
Per S.

[Endorsed:] $\frac{24}{320}$. U. S. Patent Office, Dec. 6, 1880.

1 dr.

80 To the Commissioner of Patents:

Your petitioner, George M. Peters, a citizen of the United States, and residing at the city of Columbus, in the county of Franklin, & State of Ohio, prays that letters patent may be granted to himself for the improvement in the manufacture of dash frames, set forth in the annexed specification, and he hereby appoints Wm. Hubbell Fisher, Esq., of Cincinnati, Ohio, or said Fisher's accredited agent, his attorney to prosecute this application, to modify or change the specification and claims thereof as he, said Fisher, may deem expedient, to receive any letters patent therefor, and generally to act as fully as your petitioner could do in the premises.

Witness his hand this 14th day of December, A. D. 1880.

GEORGE M. PETERS.

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81 *[Specification describing certain new and useful improvements in the manufacture of dash frames, invented by George M. Peters, of the city of Columbus, in the county of Franklin and State of Ohio.

Substitute "H" in am'd't June 8, 1883.

The principal object of my invention is to provide an efficient and useful method of welding the end bars of a metal dash frame to the bottom rail, and a method by which the bottom rail of the dash is strengthened at the weld and at the portion of said rail to which the dash foot is to be attached.

Another object of my invention is to provide a means by which a recess is formed in the bottom rail preparatory to punching said rail to receive the bolt or other attachment which secures the dash foot to the bottom rail, the operation of forming the recess being performed at the same time that the end bar is welded to the bottom rail.

Substitute "B" in am'd't May 17, 1882.

The nature and various advantages of my invention will be hereafter more fully described.

Insert "D," Apr. 2, 1883.

Referring to the drawing forming
82 part of this specification, Figs. 1 and 2 represent two different sets of dies for welding the end bar to the bottom rail of a dash frame. Each of these figures represents the upper and lower die, and also shows the dies placed face to face, as they are when the weld is completed. Figs. 3, 4, & 5 represent different forms in which the end of the end bar may be made and the relative position in which it is placed with reference to the bottom rail of the frame preparatory to welding. Figure 6 is a view looking down on one end of the lower rail, showing its appearance after the end bar has been welded to it by the use of my invention. Fig. 7 represents the lower corner of a dash frame, showing the recess in the lower rail as made by the use of my invention. Figure 8 represents a section of the lower rail of a dash with a dash foot attached, showing a recess in said rail sufficiently wide and deep to receive the nut which secures the dash foot to the rail.

83 In figure 1, A represents the lower die and A′ the upper die. In the center of the figure the dies are shown in section, said section being taken through the dotted lines X X. The dies A and A′ are provided with channels or depressions *a* to receive the end bar of the frame, and *a′* to receive the bottom rail. The channels *a* & *a′* of the die A coincide with the like channels in the die A′ when the two dies are placed together, as in the center of Fig. 1. From the bottom of the depressions *a′* in the dies A and A′ rise the tongues a^2, which, like the depressions *a*, coincide with each other when the two dies are placed together. These tongues a^2, preferably, do not rise quite to the level of the face of the dies, so that when the dies are placed together a slight space will be left between the two tongues as shown.

Substitute "E" in am'd'ts Ap'l 2d, 1883.

I preferably so form the tongues a^2 that they will approach closer to each other at that portion of themselves which forms that portion of the web *b* in the lower bar which is to be punched
84 through to receive the bolt or other device, whereby the dash frame is connected to the foot or vehicle, than at any other point, when the dies A and A′ are placed together in order that the web left in the bottom rail may be thinner in that portion of said rail where perforations are to be made to receive the bolts which secure the dash foot to the frame, as shown by the dotted lines in Fig. 6, this web being left of a uniform thickness from said end thereof to some point, as Z. One of the objects of thus making the

web thin, as described, is to enable it to be more readily punched or otherwise perforated. By means of these dies a recess is formed in either side of the bottom rail, which recess corresponds with the tongues a^2 of the dies.

Fig. 2 represents a slightly different form of dies, B representing the lower die & B′ the upper die, the two dies being placed face to face and shown in section in the middle of the figure, said section being taken through the lines *y y*. The die B′ is formed like the die A′, having the depressions *b b′* corresponding to the depressions *a & a′*, with the exception that the tongue b^2, springing from the bottom of depression *b′* and corresponding to the tongue a^2, projects slightly beyond the face of the die B′. The die B has the depressions *b b′*, which correspond to the depressions *a a′* of the die A, and which coincide with the like depressions in the die B′ when the two dies are placed together, as in the center of Fig. 2. The depression *b′* in the die B is not provided with a tongue, as is the case with the depression *a′*, but in all other respects the die B is like the die A, by means of —, with the dies B & B′, a recess is formed in one side of the bottom rail of the dash frame corresponding to the tongue b^2 of the die A′; but the die B having no corresponding tongue, no recess is formed in the side of the bottom rail, against which the die B presses, as will be obvious from the sectional view in Fig. 2. In some instances it will be desirable to make the tongue b^2 proportionately broader than is shown in Fig. 2 in order to form the recess in the bottom rail of the frame sufficiently wide to receive the nut into which the bolt which secures the dash foot to the frame is screwed, as shown in Fig. 8, in which figure C represents the bottom rail of the dash frame; D, the dash foot; *d*, the bolt which secures the bolt to the frame, and *d′*, the nut into which said bolt is screwed.

In this figure the nut *d′* is represented as being almost entirely within a recess formed in one side of the bottom rail of the frame. By this construction it will be seen that the nut *d′* is concealed and an almost entirely even surface is presented along the face of the bottom rail, so that the leather covering the frame is not greatly bulged out by the nut. Instead of the continuous tongues a^2 b^2, a row or series of studs may be used to form a number of smaller recesses, which may be readily converted into perforations to receive the bolt which secures the dash foot to the frame, but this latter construction is not so desirable as the continuous tongue, for the reasons that where studs instead of said tongue are used perforations can only be made at definite points, and the lateral adjustability of the foot will not be so perfect as it is when the continuous tongue is used, as by the use of the latter perforations can be made at any point in the recess formed by said tongue. Another reason why a continuous tongue is preferable to such studs is because the latter are liable to be more rapidly worn down in use than the tongue. If a continuous tongue be employed it need not necessarily be so long as is herein described, but its length may be varied to suit the manufacturer. These tongues may, if desired, be made of such a shape as to form a recess with a concave bottom instead

of the shape herein described. When the end bar is to be welded to the bottom rail it, the end bar, may be left straight, as shown in Fig. 3; but I preferably bend the lower end of the end bar, as shown in Figs. 4 & 5, before welding, in order to have more metal at the point of unison, & also that the grain of the end of the end bar may be run parallel to the grain of the bottom rail, thereby securing a more perfect weld. By the use of my invention this surplus metal is forced to the upper & lower side of the recess formed by the tongue a^2 or b^2, thickening the bottom rail at these points, as shown in Fig. 6, and strengthening it at the point where most strength is needed, viz., at the point of welding and the portion to which the dash foot
88 is to be attached. I am thereby enabled to use a much lighter bottom rail & throughout the balance of the frame than I otherwise could do.

Insert "C" in am'd't May 17, 1882.

The bottom rail, previous to the welding to it of the end bar, may be either a round or oval bar or of any desirable shape, or a plain bar without channel, as in Fig. 3, or a bar channeled on both sides, as in Fig. 4, or channeled on one side only, as in Fig. 5, in either of which cases the corner of the frame will present the appearance represented in Figs. 6 & 7 or any similar or other special form desired, if the dies are so made, having a recess on one or both sides of the lower rail, according as the dies B B′ or A A′ are used. If the lower rail to be used is channeled on one or both sides previous to welding, the tongue a^2 or b^2 will

See end of sentence, next page. ?

not permit the channel to be obliterated, wholly or partially, when the end bar is welded to the bottom rail; but, as before stated, the surplus metal obtained by the lap, or, if the tongue is placed so far away from the lap as not to touch it, from the metal pressed out by the tongue as it penetrates or sinks into the
89 bar, is forced to the upper an- lower sides of the channel. When the end bar & bottom rail are to be welded together the ends of both are brought to the required degree of heat & placed between the dies, which are then brought forcibly together, which welds the two ends together and forms the recess in one or both sides of the bottom rail, as before stated, at one operation. Should the manufacturer desire he may place the tongue a^2 so far away from the point of welding that none of the surplus metal of the lap will be pressed into the lower rail at the sides of the depression made by the tongue, yet if the part where the depression or channel is to be made be located near enough to the end of the lower rail where the weld is to be made, to be heated at the same heat with which the weld is to be made, the tongue would be of value in forming a channel or in preserving a channel already formed in
90 the lower rail and in reducing the thickness of the web in the lower rail where the perforations are expected to be made. Also the upright bar may be welded to the

Cancelled by am'd't Ap'l 2d, 1883.

end of the lower rail before the dies with tongues are used, and may then be submitted to the action of the dies having said tongue

or tongues. The lower rail may be bent previously to welding instead of the upright bar, but such a formation is evidently not so desirable as to bend the upright bar as described.

Claims.

What I claim as new & of my invention & desire to secure by letters patent is—

(1.) The herein-described dies for welding dash frames, said dies being provided with the depressions *a* & a^2 and a suitable tongue or tongues, substantially as & for the purposes specified.

Erase & insert "A" in am'd't June 8, 1881.

(2.) The within-described mode of welding the upright bar to the lower bar and of forming or deppening or preserving the recesses through which the device for connecting the foot to the dash is to pass, and consisting in placing the end of one of said bars against the other and subjecting the same while at a welding heat to the action of the dies A A', substantially as & for the purposes specified.

91

(3.) The dies, substantially as herein described, in combination with the lower bar and the upright bar of a dash frame, when submitted to the side dies at a welding heat, substantially as & for the purposes specified.

(4.) The combination of the lower bar and the upright bar of a dash frame at a welding heat and the dies, substantially as herein described, for the purposes specified.

(5.) The dies for welding dash frames, provided with depressions *a* & *a'* and a tongue or tongues projecting from said depression *a'*, the portion of said tongue nearest the end of the frame rising further from the bottom of said depression than the portion farthest from the end of the frame, substantially as & for the purposes specified.

(6.) The dies, substantially as described, provided with tongues sufciently wide to make a recess in the lower bar large enough for the reception of the nut *d'*, substantially as and for the purposes specified.

92

Dies and article to be operated on. Erased.

(7.) The combination of the dies, etc., and the lower bar and the upper bar of the dash frame, the said bars being at a welding heat and the end of one of said bars having been previously bent, substantially as & for the purposes specified.]*

GEORGE M. PETERS, *Inventor.*

Witnesses:

A. S. LUDLOW.
E. R. HILL.

* Words and sentences enclosed in brackets erased in original.

93 STATE OF OHIO, } ss:
County of Hamilton, }

George M. Peters, the above-named petitioner, being duly sworn, deposes and says that he verily believes himself to be the original and first inventor of the improvements in the manufacture of dash frames described and claimed in the foregoing specification; that he does not know or believe the same was ever before known or used, and that he is a citizen of the United States, and resides at the city of Columbus, in county of Franklin & State of Ohio, and that the invention described and claimed in the annexed specification has not been patented to him nor with his knowledge or consent in any foreign country.

GEORGE M. PETERS.

Sworn to and subscribed before me this 4th day of December, A. D. 1880.

[L. S.] A. S. LUDLOW,
Notary Public for Hamilton Co., Ohio.

[Endorsed:] 24320. Div. 13. U. S. Patent Office, Dec. 7, 1880.

94 *Manufacture of Dash Frames. Filed Dec. 7th,* 1880.

M. L. D. # 21767. Room No. 6.

DEPARTMENT OF THE INTERIOR,
UNITED STATES PATENT OFFICE,
WASHINGTON, D. C., *Jan. 13th,* 1881.

George M. Peters, care Wm. H. Fisher, Wiggins Block, Cin., Ohio:

This application has been examined. It is not clear what the dotted lines in Fig. 6 are intended to represent.

Claim 1 is for dies provided with suitable tongues and depressions for welding dash frames.

The use of dies for welding other articles being old, as seen in patents D. W. N. Fisher, July 17, 1877, No. 193,236 (forging & welding), and C. H. Babcock, Nov. 4, 1879, # 221,208 (wagon axles and boxes, making), there is believed to be no exercise of invention in making a die that will fit a dash frame.

Claim 2, for the mode of welding, is fully met in the above patents.

Claims 3, 4, & 7 are for combinations of the dies with the article to be operated on, a form of claim which cannot be entertained. See Com. Dec. in case of Rob't M. Franklin, 1873.

95 Claims 5 & 6 are merely claims for so forming the die as to impart a desired shape to the article operated on.

In view of the common use of swages by blacksmiths and others, no exercise of invention is perceived in making a welding die particularly adapted for use upon dash frames.

The application is rejected.

J. W. JAYNE, *Examiner.*

W. S. C. R.

[Endorsed:] Book No. 24320. 1. Rejection. Jan. 13th, 1881.

96 Geo. M. Peters, manufacturer of dash frames. Filed Dec. 7th, 1880.

Hon. Comm'r of Patents, Washington, D. C.

DEAR SIR: Erase the present claims and substitute therefor those contained in the accompanying "Schedule A."

From the description on the latter part of page 3 and fore part of page 4 I think it is perfectly clear what "the dotted lines in Fig. 6" are intended to represent.

An early reply will oblige, yours truly,

GEO. M. PETERS,
Per WM. HUBBELL FISHER, *Attorney.*

Cincinnati, Ohio, June 6th, 1881.

97 "SCHEDULE A."

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*[(1.) The combination of die A, having the wide depression *a* and the depressions *a'* arranged at right angles to depression *a* and connected therewith, and seperated from each other by the tongue a^2, and an opposing die having the wide depression *a* and a depression arranged at right angles to depression *a* and being wide or divided by a tongue, a^2, into two narrow depressions, substantially as and for the purposes specified.

Substitute "F" in am'd't May 3, 1883.

(2.) The combination of dies A and A', each having a wide depression, *a*, connected to a depression at right angles thereto, the last-named depressions being so formed that the distance between their backs is increased toward their junction with the depression *a*, substantially as and for the purposes specified.

A. Erased June 8, 1883.

(3.) The combination of die A', having a wide depression, *a*, and the depressions *a' a'* connected to depression *a* and an opposing die, as A' or B', having a wide depression, *a*, and a depression at right angles thereto, and being wide or divided by a tongue, a^2, into two narrow depressions, the depressions *a' a'* and the depression or depressions opposing the latter being so formed that the distance between the backs of said depressions is increased towards their junction with the depression *a*, substantially as & for the purposes specified.

Substitute "G" in am'd't May 3, 1883.

98

(4.) The combination of die A, having a wide depression, *a*, and the depressions *a' a'*, seperated by tongue a^2, and the die A' or B', having a wide depression, *a*, and a depression located at right angles thereto and being wide or divided by a tongue, a^2, into two narrow depressions, the face of said tongue or tongues being inclined, substantially as & for the purposes specified.

(5.) The combination of die A, having a wide depression, *a*, and the depressions *a' a'*, seperated by tongue *a*, and the die A' or B', having a wide depression, *a*, and a depression located at right angles thereto and being wide or divided by a tongue, a^2, into two narrow

depressions a' a', the latter depressions and the depression or
99 depressions opposing those being so formed that the distance between the backs of said depressions is increased towards their junction with the depression a' and face of the tongue or tongues a^2 being inclined, substantially as and for the purposes specified.

Articles. (6.) A dash frame, whose vertic*le* side bar is welded to the lower horizontal bar, the latter being provided with a longitudinal groove or channel, substantially as & for the purposes specified.

Cancelled by am'd't Apr. 2d, 1883. (7.) A dash frame, whose vertic*le* end bar is bent near the bottom, as shown, and welded to the lower horizontal bar, the latter being provided with a longitudinal groove or channel, substantially as & for the purposes specified.

(8.) A dash frame, whose vertic*le* end bar is bent near its bottom, as shown, and welded to the lower horizontal bar, provided with a longitudinal groove or channel extending into or through said weld, substantially as and for the purposes specified.

(9.) A dash frame, whose lower bar is gradually thickened
100 towards its junction with the side bar, substantially as & for the purposes specified.

(10.) A dash frame, whose vertic*le* end bar is welded to the lower horizontal bar, the latter being gradually thickened towards its junction with the end bar, substantially as & for the purposes specified. Cancelled.

(11.) A dash frame, whose vertic*le* end bar is bent and welded to the lower horizontal bar, the latter being gradually thickened towards its junction with the side bars, substantially as & for the purposes specified.

(12.) A dash frame, whose vertic*le* end bar is bent and welded to the lower horizontal bar, the latter being gradually thickened towards its junction with the end bar and provided with the longitudinal groove, substantially as and for the purposes specified.]*

GEO. M. PETERS,
Per WM. HUBBELL FISHER, *Att'y.*

Cincinnati, Ohio, June 6th, 1881.

[Endorsed:] Book No. 24320. 2. Amendment. June 8, 1881. Cancelled. U. S. Patent Office, June 8, 1881.

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* Words and sentences enclosed in brackets erased in original.

101 M. L. D. # 21767. Room No. 6.

DEPARTMENT OF THE INTERIOR,
UNITED STATES PATENT OFFICE,
WASHINGTON, D. C., *June 13th*, 1881.

George M. Peters, care Wm. H. Fisher, Wiggins Block, Cincinnati, Ohio.

Manufacture of dash frames. Filed Dec. 7th, 1880.

In the amendment to this case, filed 8th inst., the last seven (7) claims are for an article.

The introduction of such claims in an application for an apparatus is inadmissible, and they must be withdrawn before action will be taken upon the preceeding claims.

J. W. JAYNE, *Examiner.*

REDMOND.

[Endorsed:] Book No. 24320. 3. Rejection. June 13th, 1881.

102 Hon. Commissioner of Patents, Washington, D. C.

DEAR SIR: You will please recognize Mr. B. E. J. Eils, of Washington, D. C., as my associate attorney in the matter of the application of Geo. M. Peters for letters patent for improvements in the manufacture of dash frames, filed Dec. 7, 1880, No. 21767.

Yours truly, WM. HUBBELL FISHER,
Att'y for Peters.

Cincinnati, O., May 5th, 1882.

[Endorsed:] Book No. 24320. 4. Asso. power of attorney. May 8th, 1882. U. S. Patent Office, May 8th, 1882.

103 # 6–21767.

GEORGE M. PETERS — Manufacture of Dash Frames. Filed Dec. 7th, 1880.

Hon. Commissioner of Patents, Washington, D. C.

DEAR SIR: I hereby amend this application as follows:

On page one of the specification erase lines 25 and 26 and the first two words on line 27, and in lieu thereof insert:

See am'd'ts Apr. 2, 1883.

"B," erased June 8, 1883.

* [(Another object of my invention is to provide a new and useful description of dash-frame corners.

The several features of my invention and the various advantages arising from them will be hereafter more fully set forth.)]

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* Words and sentences enclosed in brackets erased in original.

On page 8 of specification, between lines 3 and 4, insert—

Erased June 8, 1883, C. [(To enable this bottom rail to be thickened at the points above mentioned the bottoms of the recesses *a'* and *b'* in the dies are preferably deepened toward and at the point where they respectively meet the verticle recesses *a* & *b*.)]*

Very respectfully, GEORGE M. PETERS,
Per WM. HUBBELL FISHER, *Att'y.*

Cincinnati, O., May 5th, 1882.

[Endorsed:] Book No. 24320. 5. Amendment. May 17th, 1882. Cancelled. U. S. Patent Office, May 17th, 1882.

104 M. L. D. 21767. Room No. 48.

DEPARTMENT OF THE INTERIOR,
UNITED STATES PATENT OFFICE,
WASHINGTON, D. C., *May* 22, 1882.

George M. Peters, care of B. E. J. Eils, Washington, D. C.

Manufacture of dash frames. Dec. 7th, 1880.

On again and more carefully examining the above case the specification, and more particularly, the claims 1 to 5, are found to be a good deal involved and confounded, owing, it may be and as it should seem, to the desire to make several different things appear to be patentably but one thing.

While the different dies, forms, and modes described and shown might possibly be held by the court to be equivalent or but modifications of the same thing, the office cannot take upon itself to so pronounce them, nor can it allow claims to alternatives, this or that.

The claims that are to the combination of die A with the die A' or B' and those which give the alternatives of a wide groove or a wide groove divided by a tongue, to wit, the 1st, 3rd, 4th, and 5th, are therefore inadmissible.

If, however, a proper claim that should generically embrace
105 what applicant seeks to obtain were presented, supposing such a claim could be made, it would probably be allowed.

Claims 6, 7, 8, 9, 10, 11, and 12 are to an entirely different invention, to wit, a dash frame, and a division of the application is therefore insisted on.

J. W. JAYNE, *Examiner.*

[Endorsed:] Book No. 24320. 6. Rejection. May 22, 1882.

* Words and sentences enclosed in brackets erased in original.

106 In the U. S. Patent Office.

Application of GEORGE M. PETERS — Dash Frames. Filed Dec. 7th, 1880. No. 21767.

To the Commissioner of Patents.

SIR: I hereby appeal to you in person from the decision of the principal examiner, made May 22nd, 1882, in the case of my above-cited application for letters patent, wherein he required a division of the application on the ground that the 6th, 7th, 8th, 9th, 10th, 11th, and 12th claims cover a seperate and distinct invention from that embraced in the remaining claims.

The following are the points of the decision on which the appeal is taken:

The examiners erred in holding that the above claims are for an entirely different invention and in requiring a division of the application, because the invention set forth in these claims is the product of the dies covered by the other claims, and because the dies and their products are inseperable in practice. The dash frame could not be made profitably in practice without the use of the dies, and the dies are of no use whatever except to make the dash frame.

107 I desire to argue this appeal orally, and I respectfully request to be informed of the day of hearing.

Respectfully submitted,

GEORGE M. PETERS,
By his attorney, B. E. J. EILS.

Washington, D. C., Sept. 12th, 1882.

[Endorsed:] Book No. 24320. 7. Appeal to Comm'r. Sept. 12, 1882. G. M. Peters' appeal. U. S. Pat. Off., Sept. 12, 1882.

108 Copy.

Room No. 4.

DEPARTMENT OF THE INTERIOR,
UNITED STATES PATENT OFFICE,
WASHINGTON, D. C., *September 22d*, 1882.

In the Matter of the Application of GEORGE M. PETERS — Manufacture of Dash Frames.

Interlocutory appeal.

You are informed that the hearing on the above appeal is fixed for Wednesday, September 27th, 1882, at 10 o'clock a. m.

Respectfully,

(Signed) M. SEATON,
Chief Clerk, for Commissioner.

George M. Peters, care B. E. J. Eils, present.

[Endorsed:] 27. Office to Geo. M. Peters. Notice of hearing by Commissioner. Sept. 22d, 1882.

109 Application of GEO. M. PETERS — Manu. of Dash Frames. Filed Dec. 7th, 1880. No. 21767.

Before the Commissioner of Patents.

An interlocutory appeal.

WASHINGTON, *Sept. 27th*, 1882.

Hon. Com'r of Patents.

SIR: This appeal from the decision of the primary examiner requiring a decision of the two sets of claims, namely, for the dash frame and the dies for making it, should be sustained, it is respectfully submitted, on the authority of *ex parte* H. Biseur, Com. Dec. 1874, 52; *ex parte* V. Fisher, Manu. Com. Dec., vol. 21, 436. Both said cases involved a question of division precisely anal-gous to the one now before you; and in the Fisher case (which I prosecuted) *ex parte* Winterlich, now relied upon by the examiner, was explained and held to be no authority for requiring a division in a case like the one in hand. The other case, *ex parte* Bancroft & Thorne, Com. Dec. 1881, 55, cited by the examiner, is not in point. In that case it was admitted that other machinery could be used for making the article.

All of which is respectfully submitted.

B. E. J. EILS,
Attorney for George M. Peters.

[Endorsed:] Sept. 27, 1882.

110 *Statement.*

Appeal to Commissioner of Patents.

In the Matter of the Application of GEORG- M. PETERS for a Patent for "Manufacture of Dash Frames." Filed Dec. 6th, 1880.

The application is for a patent for dies for making dash frames for carriages and for a dash-board frame as a product—

Claims 1 to 5, inclusive, being to the dies, and claims 6 to 12, inclusive, to the product.

The decision of the examiner requiring a division of the application was based on and conform- to Mr. Commissioner Paine's decision in *ex parte* Wintherlich, 16 O. G., page 404, and the decision of Mr. Commissioner Marble in *ex parte* Bancroft and Thorne, Decisions of 1881, page 55.

The first of the reasons of appeal, to wit, "because the invention set forth in claims 6 to 12 is the product of the dies covered by the other claims," is not a proper reason in law or under these decisions; and the second reason of appeal, to wit, "because the dies and their product are inseperable in practice," if it be meant by this that the frame could not be made in any other way than by the use of
111 the dies, is obviously erroneous.

The question of the more or less profitable mode of making dash frames is not a question for the office to concern itself with.

Sept. 21, 1882.

J. W. JAYNE, *Examiner.*

[Endorsed.]

Book No. 24320. 8.

Answer to Appeal.

SEPT. 21, 1882.

I find no error in the decision of the examiner requiring a division. The inventions are not dependent on each other; the dash can be produced by other means, although it may be true that the dies cannot be used for any other purpose. While cheapness of production is sometimes a reason with others for considering favorably an application, standing alone it is insufficient. The decision of the examiner is affirmed.

Sept. 28, 1882.

E. M. MARBLE, *Com'r.*

112 Copy.

Room No. 4.

DEPARTMENT OF THE INTERIOR,
UNITED STATES PATENT OFFICE,
WASHINGTON, D. C., *Sept. 29th*, 1882.

In the Matter of the Application of GEORGE M. PETERS, Manufacturer of Dash Frames.

Interlocutory appeal.

You are informed that the decision of the primary examiner is affirmed.

Respectfully,

(Signed) M. SEATON,
Chief Clerk, for Commissioner.

George M. Peters, care B. E. J. Eils, present.

[Endorsed:] Office to Geo. M. Peters. Notice of decision of Commissioner. Sept. 29th, 1882.

113 6-21767.

In the Matter of the Application of GEORGE M. PETERS for a Patent for Improvements in the Manufacture of Dash Frames. Filed Dec. 7th, 1880.

Hon. Commissioner of Patents, Washington, D. C.

DEAR SIR: In compliance with the decision of the primary examiner, affirmed by the Commissioner of Patents in person, I hereby amend the above-named application as follows, viz:

*[On page one of the specification erase the first sentence introduced by my amendment of May 5th, 1882, and which sentence reads as follows: "Another object of my invention is to provide a new and useful description of dash-frames corners."]

114 On line 27 of the specification and immediately before the word "referring" insert the following sentence:

[That portion of my invention which relates to dash-frame corners such as can be produced by means hereinafter described is covered by claims which formed a part of this specification and now, at the direction of the Hon. the Commissioner of Patents, have been transferred to and form part of other letters patent.]

Erased June 8, 1883. D.

For the sake of perspicuity I amend on page- 3 and 4 as follows:

On page 3 erase all the matter on line 23 and on remaining lines of said page, and on page 4 erase all matter on and between lines 1 and 11 and insert instead thereof the following, viz:

115 "I preferably so form the tongues A^2 that when the dies A and A′ are placed together they will approach closer to each other at that portion of themselves which forms that portion of the web in the lower bar which is to be punched through to receive the bolt or other device whereby the dash frame is connected to the foot or vehicle than at any other point."

Erased June 8, 1883. E.

The object of such a formation of the tongues is to make the web left in the bottom rail thinner in that portion of said rail where perforations are to be made to receive the bolts which secure the dash foot to the frame, as shown by the dotted lines in Fig. 6, this web being in other portions preferably left of an uniform thickness.

116 On page 6 of the specification erase lines 5 to 15, inclusive, except the word instead, on line 15.

On page 10 erase lines 3 to 12, inclusive.

Erase claims 6 to 12, inclusive.

Please take early action and oblige,

Yours, &c., GEORGE M. PETERS,
Per WM. HUBBELL FISHER, *Att'y.*

Cincinnati, Ohio, M'ch 31st, 1883.

[Endorsed:] Book No. 24320. 10. Amendment. April 2, 1883. Cancelled. U. S. Patent Office, April 2, 1883.

* Words and sentences enclosed in brackets erased in original.

117 Copy.

Room No. 48. 21767.

DEPARTMENT OF THE INTERIOR,
UNITED STATES PATENT OFFICE,
WASHINGTON, D. C., *April 17th*, 1883.

George M. Peters, care of B. E. J. Eils, Washington, D. C.

Manufacture of dash frames. Dec. 7, 1880.

Claims 1, 3, 4, and 5 in the above application were, on a former examination, to wit, May 22, 1882, declared to be inadmissible in consequence of certain defects that were pointed out in said letter. As the claims have not been amended to relieve them of the objections named, they are now rejected.

J. W. JAYNE, *Ex'r.*

[Endorsed:] Book No. 24320. 11. Rejection. April 17th, 1883.

118 In the U. S. Patent Office.

Room No. 48.

Before the Primary Examiner.

Application of GEORGE M. PETERS — Manufacture of Dash Frames. Filed Dec. 7th, 1880. Serial No. 21767.

Hon. Commissioner of Patents.

SIR: You are hereby authorized and respectfully requested to amend the above-cited application in the following particulars:

Erase the 1st, 3rd, 4th, and 5th claims and substitute—

F. Erased June 8, 1883.

*[1. The combination, substantially as before set forth, of the two dies having opposing angularly joined depressions a a' and a tongue, a^2, in the depression a' of either or both dies.

Erased June 8, 1883. G.

3. The combination, substantially as before set forth, of the two dies having opposing angularly joined depressions a a' and a tongue, a^2, in the depression a' of either or both dies, the depressions a' deepening toward their junctions with the depressions a.

4. The combination, substantially as before set forth, of the dies having opposing angularly joined depressions a a' and a tongue, a^2, in either or both of said depressions, the face of said tongue

119 or tongues being inclined.

5. The combination, substantially as before set forth, of the dies having opposing angularly joined depressions a a' and a tongue,

a', in either or both of the said depressions, the depressions
G. a' deepening toward their junctions with the depressions a and the face of the tongue or tongues being inclined.]*

Respectfully submitted,

GEORGE M. PETERS,
By his attorney, B. E. J. EILS.

Washington, D. C., May 3, 1883.

[Endorsed:] Book No. 24320. .12. Amendment. May 3, 1883. Cancelled. U. S. Patent Office, May 3, 1883.

120 M. L. D. 21767. Room No. 48.

DEPARTMENT OF THE INTERIOR,
UNITED STATES PATENT OFFICE,
WASHINGTON, D. C., *May 12th*, 1883.

George M. Peters, care of Wm. H. Fisher, Cincinnati, O.

Manuf. — dash frames. Dec. 7th, 1880.

Under late rulings of the office the oath in the above case is insufficient, as it does not contain the clause relative to public use and sale.

A new oath or an amendment to the present one is required.

J. W. JAYNE, *Ex'r.*

[Endorsed:] Book No. 24320. 13. Office letter. May 12, 1883.

121 6–21767. GEORGE M. PETERS — Manufacture of Dash Frames. Filed Dec. 7, 1880.

Hon. Commissioner of Patents, Washington, D. C.

DEAR SIR: As various amendments and a division has been made in this application, I have for convenience rewritten the specification and claims as allowed and attach them hereto. I also send you herewith the additional oath required by the office. Please incorporate this amendment, &c., of specification & claims into the application by erasing the ones now on file and placing in their place the specification & claims sent herewith.

Please forward notice of allowance at once and oblige,

Yours truly, GEO. M. PETERS,
Per WM. HUBBELL FISHER, *Attorney.*

Cincinnati, Ohio, June 5th, 1883.

[Endorsed:] June, 1883.

122 Specification describing certain new and useful improvements in the manufacture of dash frames invented by George M. Peters, of the city of Columbus, in Franklin county and State of Ohio.

The principal object of my invention is to provide an effi-
"H." cient and useful method of welding the end bars of a metal dash frame to the bottom rail and a method by which the

*Words and sentences enclosed in brackets erased in original.

bottom rail of the dash is strengthened at the weld and at the portion of said rail to which the dash foot is to be attached.

Another object of my invention is to provide a means by which a recess is formed in the bottom rail preparatory to punching said rail to receive the bolt or other attachment which secures the dash foot to the bottom rail, the operation
123 of forming the recess being performed at the same time *time* that the end bar is welded to the bottom rail.

The several features of my invention and the various advantages arising from them when used together or otherwise will be hereafter more fully set forth.

That portion of my invention which relates to dash-frame corners, such as can be produced by means hereinafter described, is covered by claims which formed a part of this specification and which now, at the direction of the Hon. Commissioner of Patents, have been transferred to and form part of an application for letters patent of which this is a division.

Referring to the drawing forming part of this specification, figures 1 and 2 represent two different sets of dies for welding the end bar to the bottom rail of a dash frame. Each of these figures represents the upper and lower die and also
124 shows the dies placed face to face, as they are when the weld is completed. Figures 3, 4, and 5 represent different forms in which the end of the end bar may be made and the relative position in which it is placed with reference to the bottom rail of the frame preparatory to welding. Figure 6 is a view looking down on one end of the lower rail, showing its appearance after the end bar has been welded to it by the use of my invention. Figure 7 represents the lower corner of a dash frame, showing a recess in the lower rail as made by the use of my invention. Figure 8 represents a section of the lower rail of a dash with a dash foot attached, showing a recess in said rail sufficiently wide and deep to receive the nut which secures the dash foot to the rail.

125 In figure 1, A represents the lower die and A′ the upper die. In the center of the figure the dies are shown in section, said section being taken through the dotted lines X X. The dies A and A′ are provided with channels or depressions a to receive the end bar of the frame, and a' to receive the bottom rail. The channels a and a' of the die A coincide with the like channels in the die A′ when the two dies are placed together, as in the center of figure 1.

From the bottom of the depressions a' in the dies A and A′ rise the tongues A^2, which, like the depressions a, coincide with each other when the two dies are placed together. These tongues a^2, preferably, do not rise quite to the level of the face of the dies, so that when the dies are placed together
126 a slight space will be left between the two tongues, as shown.

I preferably so form the tongues a^2 that when the dies A

and A′ are placed together said tongues will approach closer to each other at that portion of themselves which forms that portion of the web in the lower bar which is to be punched through to receive the bolt or other device whereby the dash frame is connected to the foot or vehicle, than at any other point.

The object of such a formation of the tongues is to make the web left in the bottom rail thinner in that portion of said rail where perforations are to be made to receive the bolts which secure the dash foot to the frame, substantially as shown by the dotted lines in figure 6, this web being in other portions preferably left of an uniform thickness. One of the
127 objects of thus making the web thin, as described, is to enable it to be more readily punched or otherwise perforated. By means of these dies a recess is formed in either side of the bottom rail, which recess corresponds with the tongues a^2 of the dies. Figure 2 represents a slightly different form of dies, B representing the lower die and B′ the upper die, the two dies being placed face to face and shown in section in the middle of the figures, said section being taken through the lines Y Y. The die B′ is formed like the die A′, having the depressions b b' corresponding to the depressions a & a', with the exception that the tongue b^2, springing from the bottom of the depression b' and corresponding to the tongue a^2, projects slightly beyond the face of the die B′.

The die B has the depressions b b', which correspond to the
128 depressions a a' of the die A and which coincide with the like depressions in the die B. When the two dies are placed together, as in the center of figure 2, the depression b' in the die B is not provided with a tongue, as is the case with the depression a', but in all other respects the die B is like the die A. By means of the dies B & B′ a recess is formed in one side of the bottom rail of the dash frame corresponding to the tongue b' of the die B′, but the die B, having no corresponding tongue, no recess is formed in the side of the bottom rail, against which the die B presses, as will be obvious from the sectional view in Figure 2.

In some instances it will be desirable to make the tongue b^2 or tongues a^2 proportionately broader than is shown in
129 figure 2 in order to form the recess in the bottom rail of the frame sufficiently wide to receive the nut into which the bolt which secures the dash foot to the frame is screwed, as illustrated in figure 8, in which figure C represents the bottom rail of the dash frame; D, the dash foot; d, the bolt which secures the foot to the frame, and d', the nut — which said bolt is screwed.

Instead of the continuous tongues a^2 b^2 a row of series of studs may be used to form a number of smaller recesses, which may be readily converted into perforations to receive the bolt which secures the dash foot to the frame, but this latter construction is not so desirable as the continuous tongue, for the

reason that when studs instead of a tongue are used perforations can only be made at definite points and the lateral ad-
130 justability of the foot will not be so perfect as it is when the continuous tongue is used, as by the use of the latter perforations can be made at any point in the recess formed by said tongue. Another reason why a continuous tongue is preferable to such studs is because the latter are liable to be more rapidly worn down in use than the tongue. If a continuous tongue be employed it need not necessarily be so long as is herein described, but its length may be varied to suit the manufacturer. These tongues may, if desired, be made of such a shape as to form a recess with a concave bottom instead of the shape herein described.

When the end bar is to be welded to the bottom rail it, the end bar, may be left straight, as shown in figure 3, but I preferably bend the lower end of the end bar, as shown in figures 4 and 5, before welding, in order to have more metal at the
131 point of unison, and also that the grain of the end of the end bar may run parallel to the grain of the bottom rail, thereby securing a more perfect weld.

By the use of my invention this surplus metal is forced to the upper and lower side of the recess formed by the tongue a^2 or b^2, thickening the bottom rail at these points, as shown in figure 6, and strengthening it at the point where most strength is needed, viz., at the point of welding and the portion to which the dash foot is to be attached. I am thereby enabled to use a much lighter bottom rail, and throughout the balance of the frame, than I otherwise could do.

To enable this bottom rail to be thickened at the point above mentioned the bottoms of the recesses a' and b' in the dies are preferably deepened toward and at the point where they respectively meet the vertical recessed a and b.

132 The bottom rail previous to the welding to it of the end bar may be either a round or oval bar, or of any desirable shape, or a plain bar without channel, as in figure 3, or a bar channeled in both side, as in figure 4, or channeled on one side only, as in figure 5, in either of which cases the corner of the frame will present the appearance represented in figures 6 and 7 or any similar or other special form desired, if the dies are so made, having a recess on one or both sides of the lower rail according as the dies B B′ or A A′ are used.

If the lower rail to be used is channeled on one or both sides previous to welding the tongue a^2 or b^2 will not permit the channel to be obliterated, wholly or partially, when the end bar is welded to the bottom rail; but, as before stated, the surplus metal obtained by the lap or, if the tongue is placed
133 so far away from the lap as not to touch it, from the metal pressed out by the tongue as it penetrates or sinks into the bar, is forced to the upper and lower sides of the channel.

When the end bar and bottom rail are to be welded together the ends of both are brought to the required degree

of heat and placed between the dies, which are then brought forcibly together, which welds the two ends together and forms the recess in one or both sides of the bottom rail, as before stated, at one operation.

Should the manufacturer desire, he may place the tongue a^2 so far away from the point of welding that none of the surplus metal of the lap will be pressed into the lower rail at the sides of the depression made by the tongue; yet, if the part where the depression or channel is to be made be located
134 near enough to the end of the lower rail where the weld is to be made, to be heated at the same heat with which the weld is to be made, the tongue would be of value in forming a channel or in preserving a channel already formed in the lower rail and in reducing the thickness of the web in lower rail, where the perforations are expected to be made.

What I claim as new and of my invention and desire to secure by letters patent is—

(1.) The combination, substantially as before set forth, of the two dies having opposing angularly joined depressions a a', and a tongue, a^2, in the depression a' of either or both dies.

(2.) The combination, substantially as before set forth, of the two dies having opposing angularly joined depressions a a', and a tongue, a^2, in the depression a' of either or both
135 dies, the depressions a' deepening toward their junctions with the depressions a.

(3.) The combination, substantially as before set forth, of the dies having opposing angularly joined depressions a a', and a tongue, a^2, in either or both of the said depressions, the face of said tongue or tongues being inclined.

(4.) The combination, substantially as before set forth, of the dies having opposing angularly joined depressions a a', and a tongue, a^2, in either or both of the said depressions, the depressions a' deepening toward their junctions with the depressions a and the face of the tongue or tongues being inclined.

GEO. M. PETERS.
Per WM. HUBBELL FISHER, *Attorney.*

Cincinnati, Ohio, June 5th, 1883.

[Endorsed:] Book No. 24320. 15. Amendment. June 8, 1883. U. S. Patent Office, June 8, 1883. Room No. 6. Serial No. 21767. Amendment in application of Geo. M. Peters. M'f'g dash frames.

136 STATE OF OHIO, } ss:
Hamilton County, }

George M. Peters, being duly sworn, deposes and says that the invention for which he has applied for letters patent, for improvements in "the manufacture of dash frames," and filed in the United States Patent Office on December 7th, 1880, serial number 21767, has not,

to his knowledge or belief, been in public use or on sale in the United States for more than two years prior to this above application.

GEORGE M. PETERS.

Sworn to and subscribed in my presence this 18th day of May, A. D. 1883.

[L. S.]

W. SCOTT JONES,
Notary Public, Franklin Co., O.

[Endorsed:] Room No. 48. Serial No. 21767. Additional oath. In application of Geo. M. Peters. Manufacture of dash frames. U. S. Patent Office, June 8th, 1883. Book No. 24320. 14. Supplemental oath. June 8, 1883.

137 $20. CINCINNATI, OHIO, *June 26th*, 1883.

Hon. Comm'r of Patents, Washington, D. C.

DEAR SIR: Enclosed please find draft No. 18760, Franklin Bank of Cincinnati on Bank of America, New York, for twenty (20) dollars, to be applied as the final Government fee in the matter of the application of George M. Peters for a patent for improvements in "dies for making dash frames," filed Dec. 7, 1880, allowed June 18, 1883, serial No. 21767.

Please issue patent & acknowledge receipt, & oblige, yours truly,

WM. HUBBELL FISHER,
Per STREHLI.

[Endorsed:] U. S. Patent Office, June 28, 1883.

138 Issue division.

All communications should be addressed to "The Commissioner of Patents, Washington, D. C."

Serial No. 21767.

DEPARTMENT OF THE INTERIOR,
U. S. PATENT OFFICE,
WASHINGTON, D. C., *June* 18, 1883.

George W. Peters, care B. E. J. Eils, asso., city.

SIR: Your application for a patent for an improvement in dies for making dash frames, filed Dec. 7, 1883, has been examined and allowed.

The final fee, twenty dollars, must be paid, and the letters patent bear date as of a day not later than six months from the time of this present notice of allowance.

If the final fee is not paid within that period the patent will be withheld, and your only relief will be by a renewal of the application, with additional fees, under the provisions of section 4897, Revised Statutes. The office aims to deliver patents upon the day of their date and on which their term begins to run, but to do this properly applicants will be expected to pay their final fees at least

twenty days prior to the conclusion of the six months allowed them by law.

139 The printing, photographing, and engrossing of the several patent parts preparatory to final signing and sealing will consume the intervening time, and such work will not be done until after the payment of the necessary fees.

When you send the final fee you will also send, distinctly and plainly written, the name of the inventor and title of invention, as above given, date of allowance (which is the date of this circular), date of filing, and, if assigned, the names of the assignees.

If you desire to have the patent issue to assignees, an assignment, containing a request to that effect, together with the fee for recording the same, must be filed in this office on or before the date of payment of final fee.

Additional copies of specifications and drawings will be charged for at the following rates: Single copies, uncertified, 25 cents; twenty copies or more, 10 cents each. The money should accompany the order.

Very respectfully,

E. M. MARBLE,
Commissioner of Patents.

[Written across the face in red ink:] ☞ In remitting the final fee give the serial number at the head of this notice.

[Written on the margin in red ink:] The within title is that given by the examiner in charge as most appropriate to your invention. Should you desire a change in the same, satisfactory reasons must be given therefor on or before the payment of the final fee.

140 Serial No. 21767.

$\frac{24}{320}$ 1880. Jayne.

No. 281,553.

George M. Peters,

Of Columbus,
County of Franklin,
State of Ohio.
Manufacture of dash frames.
Rec'd Dec. 6, 1880.
Petition, Dec. 7, 1880.
Affidavit, " " "
Specification, Dec. 7, 1880.
Drawing, " 7, "
Model. None required.
Cert. dep., —.
1. Cash, $15, Dec. 6, 1880.
Add'l fee cert., —.
" cash, $20, June 28, '83.
2. Examined June 12, 1883. J. W. Jayne.
Issue, June 15, '83. J. W. Babson.
Patented July 17, 1883.
3. Circular, June 18, '83.
Wm. H. Fisher, Wiggins Block, Cincinnati, Ohio.
B. E. J. Eils, asso. att'y, present.

141 1880.

Contents. G

Application papers.
1. Rejected Jan'y 13, 1881.
2. Amendment, June 8, 1881.
3. Rejected June 13, 1881.
4. Asso. power of att'y, May 8, 1882.
5. Amendment, May 17, 1882.
6. Rejection, May 22, 1882.
7. Appeal to Comm'r, Sept. 12, 18-2.
8. Appeal answered Sept. 21, 1882.
9. Examiner affirmed Sept. 28, 18-2.
10. Amendment, April 2, 1883.
11. Rejection, April 17, 1883.
12. Amendment, May 3, 1883.
13. Letter of office, May 12, '83.
14. Supplemental oath, June 8, '83.
15. Amendment, June 8, 1883.
16. Passed June 12, 1883.
17.
18.

Title: Improvement in dies for making dash frames.
Ex'd: J. A. W. M. McK.

142 UNITED STATES PATENT OFFICE.

GEORGE M. PETERS, of Columbus, Ohio.

Die for Making Dash Frames.

Specification forming part of Letters Patent No. 281,553, dated July 17, 1883; application filed December 7, 1880. (No model.)

To all whom it may it concern:

Be it known that I, George M. Peters, of the city of Columbus, in Franklin county and State of Ohio, have invented certain new and useful improvements in the manufacture of dash frames, of which the following is a specification:

The principal object of my invention is to provide an efficient and useful method of welding the end bars of a metal dash frame to the bottom rail, and a method by which the bottom rail of the dash is strengthened at the weld and at the portion of said rail to which the dash foot is to be attached.

Another object of my invention is to provide a means by which a recess is formed in the bottom rail preparatory to punching said rail to receive the bolt or other attachment which secures the dash foot to the bottom rail, the operation of forming the recess being performed at the same time that the end bar is welded to the bottom rail.

The several features of my invention and the various advantages arising from them, when used together or otherwise, will be hereinafter more fully set forth.

143 That portion of my invention which relates to dash-frame corners such as can be produced by means hereinafter described is covered by claims which formed a part of this specification and which now, at the direction of the Hon. Commissioner of Patents, have been transferred to and form part of an application for letters patent of which this is a division.

Referring to the drawings forming part of this specification, figures 1 and 2 represent two different sets of dies for welding the end bar to the bottom rail of a dash frame. Each of these figures represents the upper and lower die, and also shows the dies placed face to face, as they are when the weld is completed. Figs. 3, 4, and 5 represent different forms in which the end of the end bar may be made and the relative position in which it is placed with reference to the bottom rail of the frame preparatory to welding. Fig. 6 is a view, looking down on one end, of the lower rail, showing its appearance after the end bar has been welded to it by the use of my invention. Fig. 7 represents the lower corner of a dash frame, showing a recess in the lower rail as made by the use of my invention. Fig. 8 represents a section of the lower rail of a dash with a dash foot attached, showing a recess in said rail sufficiently wide and deep to receive the nut which secures the dash foot to the rail. In Fig. 1, A represents the lower die and A′ the upper die. In the center of

144 the figure the dies are shown in section, said section being taken through the dotted lines X X. The dies A and A′ are provided with channels or depressions, *a*, to receive the end bar of the frame and, *a′*, to receive the bottom rail. The channels *a* and *a′* of the die A coincide with the like channels in the die A′ when the two dies are placed together, as in the center of Fig. 1.

From the bottom of the depressions *a′* in the dies A and A′ rise the tongues a^2, which, like the depressions *a*, coincide with each other when the two dies are placed together. These tongues, a^2, preferably do not rise quite to the level of the face of the dies, so that when the dies are placed together a slight space will be left between the two tongues, as shown. I preferably so form the tongues a^2 that when the dies A & A′ are placed together said tongues will approach closer to each other at that portion of themselves which forms that portion of the web in the lower bar which is to be punched through to receive the bolt or other device whereby the dash frame is connected to the foot or vehicle than at any other point. The object of such a formation of the tongues is to make the web left in the bottom rail thinner in that portion of said rail where perforations are made to receive the bolts which secure the dash foot to the frame, substantially as shown by the dotted lines in Fig. 6, this web being in other portions preferably left of a uniform thickness. One of

145 the objects of thus making the web thin, as described, is to enable it to be more readily punched or otherwise perforated. By means of these dies a recess is formed in either side of the bottom rail, which recess corresponds with the tongues a^2 of the dies. Fig. 2 represents a slightly different form of dies, B representing the lower die, and B′ the upper die, the two dies being placed face to face and shown in section in the middle of the figure, said section being

taken through the lines *y y*. The die B′ is formed like the die *a′*, having (281,553) the depressions *b b′* corresponding to the depressions *a* and *a′*, with the exception that the tongue b^2, springing from the bottom of depression *b′* and corresponding to the tongue a^2, projects slightly beyond the face of the die B′. The die B has the depressions *b b′*, which correspond to the depressions *a a′* of the die A, and which coincide with the like depressions in the die B′ when the two dies are placed together, as in the center of Fig. 2. The depression *b′* in the die B is not provided with a tongue, as is the case with the depression *a′*, but in all other respects the die B is like the die A. By means of the dies B and B′ a recess is formed in one side of the bottom rail of the dash frame corresponding to the tongue b^2 of the die B′, but the die B having no corresponding tongue no recess is formed in the side of the bottom rail against which the die
146 B presses, as will be obvious from the sectional view in Fig. 2.

In some instances it will be desirable to make the tongue b^2 or tongue a^2 proportionately broader than is shown in Fig. 2 in order to form the recess in the bottom rail of the frame sufficiently wide to receive the nut into which the bolt which secures the dash foot to the frame is screwed, as illustrated in Fig. 8, in which figure C represents the bottom rail of the dash frame; D, the dash foot; *d*, the bolt which secures the foot to the frame, and *d′*, the nut into which said bolt is screwed. Instead of the continuous tongues a^2 b^2, a row or series of studs may be used to form a number of smaller recesses, which may be readily converted into perforations to receive the bolt which secures the dash foot to the frame, but this latter construction is not so desirable as the continuous tongue, for the reason that where studs instead of a tongue are used perforations can only be made at definite points, and the lateral adjustibility of the foot will not be so perfect as it is when the continuous tongue is used, as by the use of the latter perforations can be made at any point in the recess formed by said tongue. Another reason why a continuous tongue is preferable to such studs is because the latter are liable to be more rapidly worn down in use than the tongue. If a continuous tongue be employed it need not necessarily be so long as is herein described, but its length may be varied to suit the manufact-
147 urer. These tongues may, if desired, be made of such a shape as to form a recess with a concave bottom instead of the shape herein described.

When the end bar is to be welded to the bottom rail it (the end bar) may be left straight, as shown in Fig. 3; but I preferably bend the lower end of the end bar, as shown in Figs. 4 and 5, before welding in order to have more metal at the point of unison, and also that the grain of the end bar may run parallel to the grain of the bottom rail, thereby securing a more perfect weld. By the use of my invention this surplus metal is forced to the upper and lower side of the recess formed by the tongue a^2 or b^2, thickening the bottom rail at these points, as shown in Fig. 6, and strengthening it at the point where most strength is needed, viz., at the point of welding and the portion to which the dash-foot is to be attached. I am

thereby enabled to use a much lighter bottom rail and throughout the balance of the frame than I otherwise could do.

To enable this bottom rail to be thickened at the points above mentioned, the bottoms of the recesses a' and b' in the dies are preferably deepened toward and at the point where they respectively meet the vertical recesses a and b. The bottom rail, previous to the welding to it of the end bar, may be either a round or oval bar, or of any desirable shape, or a plain bar without channel, as in Fig. 3, or a bar channel- on both sides, as in Fig. 4, or channeled on one
148 side only, as in Fig. 5, in either of which cases the corner of the frame will present the appearance represented in Figs. 6 and 7, or any similar or other special form desired, if the dies are so made, having a recess on one or both sides of the lower rail, according as the dies B B′ or A A′ are used. If the lower rail to be used is channeled on one or both sides previous to welding, the tongue a^2 or b^2 will not permit the channel to be obliterated wholly or partially when the end bar is welded to the bottom rail; but, as before stated, the surplus metal obtained by the lap, or, if the tongue is placed so far away from the lap as not to touch it, from the metal pressed out by the tongue as it penetrates or sinks into the bar, is forced to the upper and lower sides of the channel. When the end bar and bottom rail are to be welded together the ends of both are brought to the required degree of heat and placed between the dies, which are then brought forcibly together, which welds the two ends together and forms the recess in one or both sides of the bottom rail, as before stated, at one operation. Should the manufacturer desire he may place the tongue a^2 so far away from the point of welding that none of the surplus metal of the lap will be pressed into the lower rail at the sides of the depression made by the tongue, yet if the part where the depression or channel is to be made be located near enough to the end of the lower rail where the weld is to be made, to be heated at the same heat with which the weld
149 is to be made, the tongue would be of value in forming a channel, or in preserving a channel already formed in the lower rail, and in reducing the thickness of the web in the lower rail, where the perforations are expected to be made.

What I claim as new and of my invention and desire to secure by letters patent is—

1. The combination, substantially as before set forth, of the two dies having opposing angularly joined depressions a a', and a tongue, a^2, in the depression a' of either or both dies.

2. The combination, substantially as before set forth, of the two dies having opposing angularly joined depressions a a', and a tongue, a^2, in the depression a' of either or both dies, the depressions a' deepening toward their junctions with the depressions a.

3. The combination, substantially as before set forth, of the dies having opposing angularly joined depressions a a', and a tongue, a^2, in either or both of the said depressions, the face of said tongue or tongues being inclined.

4. The combination, substantially as before set forth, of the dies having opposing angularly joined depressions a a', and a tongue, a^2,

in either or both of the said depressions, the depressions *a'* deepening toward their junction with the depressions *a*, and the face of the tongue or tongues being inclined.

GEORGE M. PETERS.

Witnesses:
A. S. LUDLOW.
E. R. HILL.

(Here follows diagram marked p. 150.)

151 (Endorsed:) U. S. cir. court, southern dist. of Ohio. Geo. M. Peters *vs.* Active M'f'g Co. No. 3630. Defendant'- Exhibit "Patent File." E. W. Rector, notary public & special examiner. Filed June 25th, 1885. B. R. Cowen, clerk.

152 Produced on behalf of defendant, JAMES MURDOCK, Jr. Witness, being duly sworn, deposes and says as follows:

Ques 1. State your name, age, residence, and occupation.

Ans. James Murdock, Jr.; age, 45 years; residence, Cincinnati, Ohio; occupation, stamp-cutter, engraver, and die-sinker.

Q. 2. How long have you been engaged in this business?

Ans. Twenty-nine years.

Ques. 3. I now show you a pair of dies, marked "Defendant's Exhibit C," and ask you whether you ever made a pair of dies similar to this pair; and, if so, for whom?

Ans. I made dies similar to that for two parties—Active Man'f'g Company and the Enterprise Man'f'g Company.

Ques. 4. State what was shown you and what instructions were given when the dies were ordered.

Ans. When the first dies were ordered by the Active Company they brought me a pair of dies perfectly plain, ready to be sunk. They said they wished the two pieces of iron like Exhibits "A" and "B" welded together at right angles in such a manner—that is, the dies were to be constructed in such a manner so as to bring the center of one piece of iron opposite the center of the other.

After talking together we naturally concluded that the way
153 we would do it would be to sink half in one and half in the other die. It was distinctly understood that the shape of the iron was to be preserved.

Q. 5. Did it require any particular ingenuity or invention to make the die as you made it?

Objected to as incompetent.

Ans. No, sir.

Q. 6. I now show you letters patent 281,553 and ask you whether any die maker called upon to make dies for welding together a piece of channelled iron and a piece of bar-iron at right angles in such a way as to preserve the channel in the one piece, or even to modify the form of the channel by deepening it at one point, would have any difficulty in constructing dies like those shown in the patent?

150

G. M. PETERS,

DIE FOR MAKING DASH FRAMES.

No. 281,553. Patented July 17, 1883.

Fig. 1.

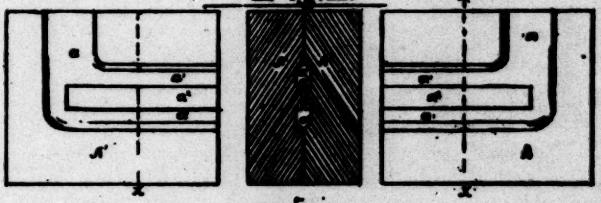
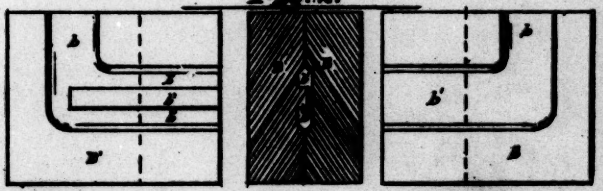
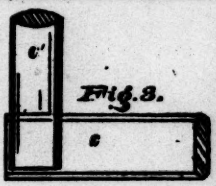
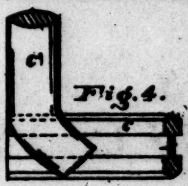
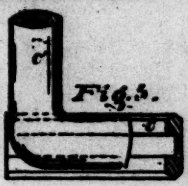


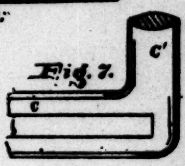
Fig. 2.











Witnesses.

J. M. Stubbs

E. Pettibone

Inventor.

George M. Peters

per Wm. Hubbell Fuller

Atty

No. 254

Peters

v

Action Mfg Co

Sp 150

Objected to by counsel for complainant as incompetent, the question being one for the court.

Ans. No, sir.

Q. 7. What is the object to be considered or the guide in making dies for forging or welding?

Ans. Well, if I understand what is meant by the question—is the question meant to preserve the shape of the iron?

(Counsel for def'ts answers that the question relates to the form of the die—What is the guide?)

Witness then answers: The shape of the iron is the guide.

154 Q. 8. Could any die-sinker make the dies for forging iron when he knows the shape of the pieces to be forged or welded?

Same objection as made by counsel for complainant heretofore to Ques. 5.

Ans. Any die-sinker of ordinary skill should have no difficulty in doing the work.

Cross-examination by Mr. FISHER:

X Q. 9. Do you do any blacksmith welding or forging?

Ans. Yes, sir.

X Q. 10. Have you seen letters patent 281,553 before to-day?

Ans. No, sir.

X Q. 11. Have you examined the patent carefully?

A. No, sir, except the drawings. I just examined the drawings carefully; I did not read the claims.

X Q. 12. Do the drawings of this patent show the dies to be adapted for double or single channel bar-iron?

Ans. The drawings show both kinds, as I take it.

JAMES MURDOCK, JR.

The taking of this testimony is now adjourned until ten o'clock to-morrow morning, Saturday, January 17, 1885.

155 SATURDAY, *January 17th*, 1885.

Met, pursuant to adjournment, at ten o'clock a. m.

Present: Same as on yesterday.

FRANK THOMAS, a witness produced on behalf of defendant, being first duly sworn, deposes and says as follows:

Q. 1. State your name, age, residence, and occupation.

Frank Thomas; age, fifty-two years; residence, Cincinnati; occupation, machinist & inventor and mechanical engineer.

Q. 2. What experience have you had in forging and die-making?

—. Since 1870 I have done more or less of that work; for the last five years a great deal of it.

Q. I now show you two pieces of iron, marked Defendant's Exhibits A and B, and ask you whether it would require any invention to construct dies or swages for welding the two together at right

angles and preserving their shape of the channel in the piece marked B at the point of connection.

Ans. Well, I would answer that question by referring to an ordinary blacksmith or carriage blacksmith. He would tell you that he would stick that—that is, he would take a heat anywhere
156 that you would want to weld it. I ought to have said he would have marked this out a little (pointing to Exhibit A).

No, sir. If you were to bring that to me and ask me to do it I would make you a top and bottom swage that would either go into a steam hammer or a foot hammer to accomplish the work.

Q. 4. I call your attention to the first part of your last answer and ask you whether in making it you understood the exact purport of the question?

Ans. Well, the first question I did not exactly understand.

Q. 5. I now ask you whether any ordinarily skilled blacksmith or die-sinker could make dies for welding two such pieces of iron together and preserving the channel?

Ans. I think so. I never found much trouble.

Q. 6. I now show you two dies, marked Defendant's Exhibit "C," and ask you whether it would require any inventive talent to construct them?

Ans. A blacksmith, if you would give him that (referring to Exhibit B) would make it just that way.

Cross-examination by Mr. FISHER:

X Q. 7. Mr. Thomas, do you consider the pair of dies
157 marked "Exhibit C" as operative ones?

Ans. Certainly; but I don't like them; may be for some, but not just the way I would make them. Some make them one way, and some another, but the principle is the same.

FRANCIS THOMAS.

As counsel for the complainant was not here at the opening of the of the above deposition he now objects to said deposition as incompetent, irrelevant, and -material.

Counsel for defendant now offers in evidence a copy of letters patent No. 224,792, granted Geo. M. Peters, Feb'y 24, 1880, for vehicle dash frame, and has the same marked "Defendant's Exhibit Dash Patent."

GEORGE MONTIETH, a witness produced on behalf of defendant, being first duly sworn, deposes and says as follows:

Q. 1. State your name, age, residence, and occupation.

—. Geo. Monteith; age, 45; residence, Cincinnati; occupation, dash-maker; secretary and treasurer of the Active M'f'g Company.

Q. 2. Has the Active M'f'g Co. ever used dies or swages in making the frames for their dashes in which the tongue or
158 tongues were deeper at any one point than at another?

Ans. No, sir.

Q. 3. Have you or your company used any dies in which the

tongue or tongues were inclined, or the depressions were deeper at one point than another?

Ans. No, sir.

Q. 4. Can you produce duplicates of the dies used by your company?

Ans. Yes, sir; and I here produce a pair of dies marked "Defendant's Exhibit C." These Exhibits C are castings taken from dies now in use. They are exact impressions, the shrinkage of the iron in castings excepted.

Q. 5. Have you ever used any other form of dies?

Ans. Yes, sir; we have used dies with grooves for oval iron only, and dies for channel iron and oval combined with the tongue in the channel on one said only.

Q. 6. Did the last named differ from "Exhibit C" in any other way excepting the omission of the tongue in one of the dies?

Ans. No, sir; except that the tongue had a greater projection.

Q. 7. Were the dies last spoken of used on iron channels on one or both sides?

Ans. Mainly on one side, although we used them with iron
159 channeled on both sides.

Q. 8. When the channel is on one side of the iron only is it usually made deeper?

Ans. We made ours deeper for that purpose—to conform to the shape of the iron.

Q. 9. Question 8 re-read to witness, who answers:

Ans. I misunderstood the question. Yes, sir.

Q. 10. State how you came to get these dies.

Ans. We wished to weld channelled and oval iron together and ordered a die-sinker to make the required dies. We made a drawing on paper of the shape and dimensions and also furnished the die-sinker with a sample of the channeled and oval iron to be welded. He made the dies to accomplish the object desired without any trouble.

Q. 11. When was this?

Ans. In the summer of 1879.

Q. 12. Did it require any particular ingenuity or invention, either on your part or that of the die-sinker, to make these dies?

Objected to as incompetent and irrelevant.

Ans. Not in the least. The process was as clear and simple as though we had ordered dies for welding two pieces of oval
159½ iron only. It was a simple question of planing out straight grooves in accordance with dimensions given.

Counsel for defendant desires to submit to this witness the models offered in evidence by complainants, which have not been produced, and he requests counsel for complainant to produce them as soon as he can. In the mean time submits the witness for cross-examination, with the intention of examining him upon these models when produced, if found necessary.

Counsel for complainant prefers to wait until the direct examina-

tion is closed, and this testimony is therefore adjourned until Tuesday, January 20th, 1885, at 11 o'clock a. m.

TUESDAY, *January 20th*, 1885—11 a. m.

Met pursuant to adjournment, same parties being present.

Counsel for complainant waives cross-examination of this witness.

GEO. MONTEITH.

160 United States Circuit Court, Southern District of Ohio. In Equity.

GEO. M. PETERS *vs.* ACTIVE M'F'G CO. } No. 3630.

DEFENDANT'S EXHIBIT "DASH PATENT. E. W. Rector, Notary Public & Special Examiner.

UNITED STATES PATENT OFFICE.

GEORGE M. PETERS, of Columbus, Ohio.

Vehicle Dash-Frame.

Specification forming part of Letters Patent No. 224,792, dated February 24, 1880; application filed May 5, 1879.

To all whom it may concern:

Be it known that I, George M. Peters, of the city of Columbus, county of Franklin, and State of Ohio, have invented a certain new and useful construction of dash-frames and dash-feet, of which the following is a specification:

One object of my invention is a novel construction of the dash-frame, whereby the latter is rendered light and strong, can be manufactured with little expense, and whereby the various portions of the frame are cheaply, readily, and firmly secured together, and also whereby the dash is cheaply, quickly, and firmly connected to a permanent or detachable portion of the vehicle.

Another object of my invention is a formation of a dash-foot for connecting a dash to a vehicle, whereby the foot is at once strong and light and can be cheaply manufactured.

Referring to the drawings forming a part of this specification, figure 1, A, B, C, and D represent a dash-frame constructed in accordance with my improvements, a section through the channeled lower rail of dash, and a sectional and perspective view of my special form of bar. Fig. 2, E and F are a perspective and sectional view of a modification of the mode of attaching the bar to the lower rail of the dash where said lower rail is channeled on only one side; and G is a perspective view, showing a portion of the lower rail channeled only on one side and a channeled foot of my invention attached thereto, showing manner of attaching the foot to the lower

rail by a T-headed bolt. Fig. 3, H I, Fig. 4, J K, and Fig. 5, L M, are sectional views, showing different modes of attaching the foot to the lower rail of the dash. Fig. 6 is a perspective view, showing how the extension *e'* of the upright bar may be riveted to the thin web or channeled portion of the lower rail.

A', Fig. 1, represents the lower rail of a dash-frame, channeled, as shown at B. This rail is provided at either end with the slot *a* or the holes *a'*, for attaching the feet to the dash-frame. The lower ends of the upright bars of the frame are split, and each half provided with a T-head. (Shown at D, Fig. 1.) These T-heads are made of the same width as the channel in the lower rail, into which they fit. The two halves of this split end are separated from each other to admit the lower rail between them. The upper ends of the upright bars are provided with notches *d*, for the reception of the upper rail of the dash-frame.

The mode of attaching and securing the upright bars to the lower and upper rails is as follows: The two halves of the split lower end of the upright bar are placed one on either side of the lower rail, and the T-head on either half is allowed to pass the channel, as shown at *c*, Fig. 1, into which it ultimately is secured, the cleft in the end of the bar being of sufficient extent to permit it to pass. The object of this is to allow the upper end of the upright bar to pass under the top rail of the frame. When the upright bar has passed down sufficiently for this it is returned, so that the top rail fits into the notch in the upper end of the bar. The T-heads on the split lower end of the bar are now directly opposite the channel in the lower rail, and by a blow of the hammer can be forced together, the T-heads fitting into the channels on either side of the lower rail. Dents or depressions are made near the margin of the channel (shown at *b*, Fig. 1), forcing the edges of the channel over and against the edges of the T-heads on the lower end of the upright bar, which heads are thus securely held in the channels. By a blow of the hammer upon the sides of the upper end of the rod the sides or wings of the notch *d* are battered against the top rail of the frame, and the upright bar is now securely fixed in its proper place.

The T-head or heads may, when preferred, be secured to the rail by riveting instead of by the dents or depressions above mentioned.

When preferred, one of the limbs of the notch in the upper end of the post may, in the first instance, be bent down, in which case the cleft in the lower end of the bar need not be deeper than just sufficient to allow of the ends of the lower end of the upright fitting into their respective channels in the rail. After the upright bar has straddled the latter so that the T-heads fit into their respective channels, the upper end of the bar can be fitted to the upper rail, and the bent down limb of said notch in the upper end of the bar
161 then bent back, and thus the limbs of the notch be caused to embrace the sides of the upper rail.

It will be seen that by the aforesaid means the upright bars of a dash-frame are easily, quickly, and cheaply attached to the top and bottom rails.

I preferably cast the upright bars of the desired shape, the ma-

terial used being malleable iron, to admit of their being bent without injury when the split ends are forced together.

By constructing dash-frames in the manner described much of the expense incurred in the ordinary mode of manufacture is saved. The lower rail is made broad and flat, so that the slot *a* or holes *a'* can be made therein and leave a strong bearing for the attachment of the feet.

Should it be preferred, instead of constructing the lower rail and lower end of the upright bars as already described, the lower rail may be channeled only on one side, and the lower end of the upright bar provided with only one T-head to fit in said channel, as shown in Fig. 2. Where the neck of this single T-head joins the body of the bar a V-shaped notch, *e*, Fig. 2, is provided to fit over a correspondingly-beveled edge of the lower rail, so that when the T-head is forced into and secured in the channel in a similar manner to the securing of the bar already described, the said bar is firmly secured in position.

Should it be deemed preferable, one of the arms of the T-head on the lower end of the upright bars may be left off, making the head that fits into the channel an L instead of a T head.

The T portions of the arm (or arms, where there are two) on the lower end of the upright bar may be omitted and the stub end of the arm or arms riveted to the channeled or thin portion of the lower rail. (See Fig. 6 of the drawings.)

The notch or recess *f*, Fig. 2, permits the arm or arms provided with the T or L shaped heads, or the stub end or extension *e'* when said heads are omitted, to come in contact with the web of the channel in the lower rail or bar.

The upper end of the upright bar may be fastened in any convenient or desirable manner, although I prefer the mode herein set forth.

The wide vertical flat faces of the lower rail afford a desirable bearing for the dash-foot or vehicle-body (as the rail can be readily perforated for bolts or rivets, and the thick edges left above and below the perforations are first-rate bearings for said foot or body) and possess great advantages over the customary convex or oval rails, the central portion of which being thick renders them hard to punch, and the edges afford no flat surface for said foot or body to press against. The rail therefore, when more or less flat on one or both sides, becomes a modification of the forms of rail shown herein, and possesses some of their advantages.

G, Fig. 2, is a perspective view of the under side of my channeled or concave foot, which is attached to the lower rail of the dash-frame by a T-headed bolt, the head of the bolt fitting in the channel in the rail. A bolt having a T-head so narrow as to fit within the channel is applicable for attaching the feet only where holes, instead of a slot, is used, or where the slot is of less length or width than the channel in the rail.

Fig. 3, H represents a section through the lower rail, channeled on both sides, and the foot, with a T-headed bolt passing through a

hole in the rail to secure the foot to it, the T-head fitting into the channel in the rail.

Fig. 4, J is a sectional view, representing a modification, the difference being that at J the rail is represented as channeled only on one side, and at H the rail is channeled on both sides.

Fig. 5, L and M represent sections through the lower rail and the foot, the foot being secured to the rail by bolts the heads of which fit into the channel in the rail, the round holes or slots in the rail through which the bolts pass being of less diameter than the width of the channel. Should a slot of the same width as the channel in the rail be used instead of holes, a T-headed bolt having a head narrow enough to altogether fit into the channel cannot conveniently be used unless the bolt-head is much longer than the slot, as the head would pass through the slot. In this case I use a bolt with a head broader than the channel. (Shown at I, Fig. 3, where the rail is represented as channeled on both sides, and at K, Fig. 4, the lower rail being represented as channeled only on one side.)

Of course that feature of my invention which consists of the combination of channeled rail and the uprights may be used without the combination of channel and bolt with foot or vehicle, and vice versa.

The foot may be channeled or concaved on the opposite side to that shown and described herein, or on both sides, these forms of construction being both obvious equivalents of the one shown and described.

The depth and the length of the channel or concavity in the dash rail or foot may be varied to suit the requirements of the manufacturer.

Another advantage of that portion of my invention which relates to channeling or recessing the foot is that the same may be readily cast of malleable iron, the channeling obviating the injurious effects arising from the presence of shrunken corners in thick malleable iron castings. The channeling or recessing of the foot enables the latter to be made light and thin and to be better annealed.

What I claim as new and of my invention is—

1. A dash provided with a rail having vertically-flat sides, one or both of said sides being exteriorly channeled, substantially as and for the purposes specified.

162 2. In a dash-frame, an upright having its upper end split to receive an upper cross rail or bar and its lower end provided with shoulder *e* and flange or extension *e'*, substantially as and for the purposes specified.

3. In a dash-frame, the upright bar having its upper end split to receive an upper cross bar or rail and its lower end provided with shoulder *e* and flange or extension *e'*, in combination with an upper cross rail or bar and a lower cross rail or bar, the latter provided with a channel and a recess, *f*, which receives the extension and allows it to lie flat against the web, substantially as and for the purposes specified.

4. In a dash-frame, the combination of the channeled rail and

the upright bar provided with one or more T-heads, substantially as and for the purposes specified.

5. In a dash-frame, the combination of the channeled rail and the upright bar provided with one or more T-heads, and the holes or slots through the rails, substantially as and for the purposes specified.

6. In combination, the rail provided with one or more channels and bolt-holes through the bar in the channel, and a T-headed bolt, substantially as and for the purposes specified.

7. In combination, the rail provided with one or more channels and bolt-holes of suitable size through the rail, the T-headed bolt, and the foot or vehicle, substantially as and for the purposes specified.

8. In combination, a dash-frame and a rail provided exteriorly with one or more channels and bolt-holes or slots in the channel and through the rail, said holes being of smaller diameter or width than the width of the channel, substantially as described.

9. The foot, channeled on either or both sides, substantially as and for the purposes specified.

10. In combination, the foot and channeled rail provided with bolt-holes or slots, and a T-headed bolt whose head is within the channel, substantially as and for the purposes specified.

11. A channeled dash-frame adapted to be connected to a permanent or detachable portion of the vehicle, and consisting of an exterior continuously-solid frame provided with separable inner bars or braces terminating with said exterior frame, and having a construction substantially as described, whereby they are readily attachable to said exterior frame, substantially as and for the purposes set forth.

GEORGE M. PETERS.

Attest:
F. P. JENKINS.
OSCAR G. PETERS.

(Here follows diagram marked p. 163.)

164 United States Circuit Court, Southern District of Ohio. In Equity.

GEO. M. PETERS
v.
ACTIVE M'F'G CO. } 3630.

I, Edward W. Rector, a notary public in and for the county of Hamilton and State of Ohio, do hereby certify that the witness- in the foregoing depositions were by me first duly sworn to tell the truth, the whole truth, and nothing but the truth; that the foregoing depositions by them respectively subscribed were reduced to writing by me and by said witnesses respectively subscribed in my presence, and were continued from day to day, as set forth, and were taken at the time and place specified in the accompanying notice.

I further certify that I am not attorney for either party in this

G. M. PETERS.
Vehicle Dash Frame.

No. 224,792. Patented Feb. 24, 1880.

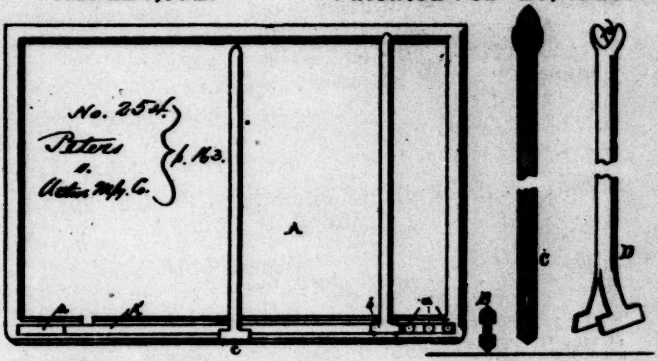


Fig. 1.

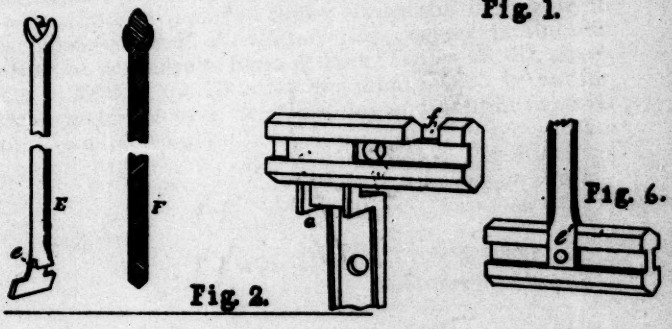


Fig. 2.

Fig. 6.

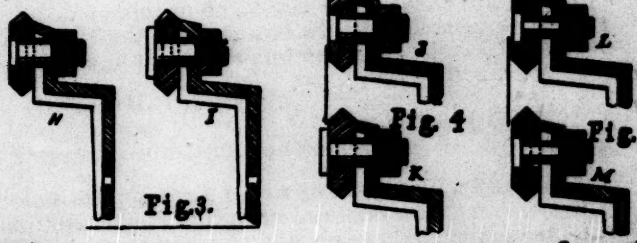


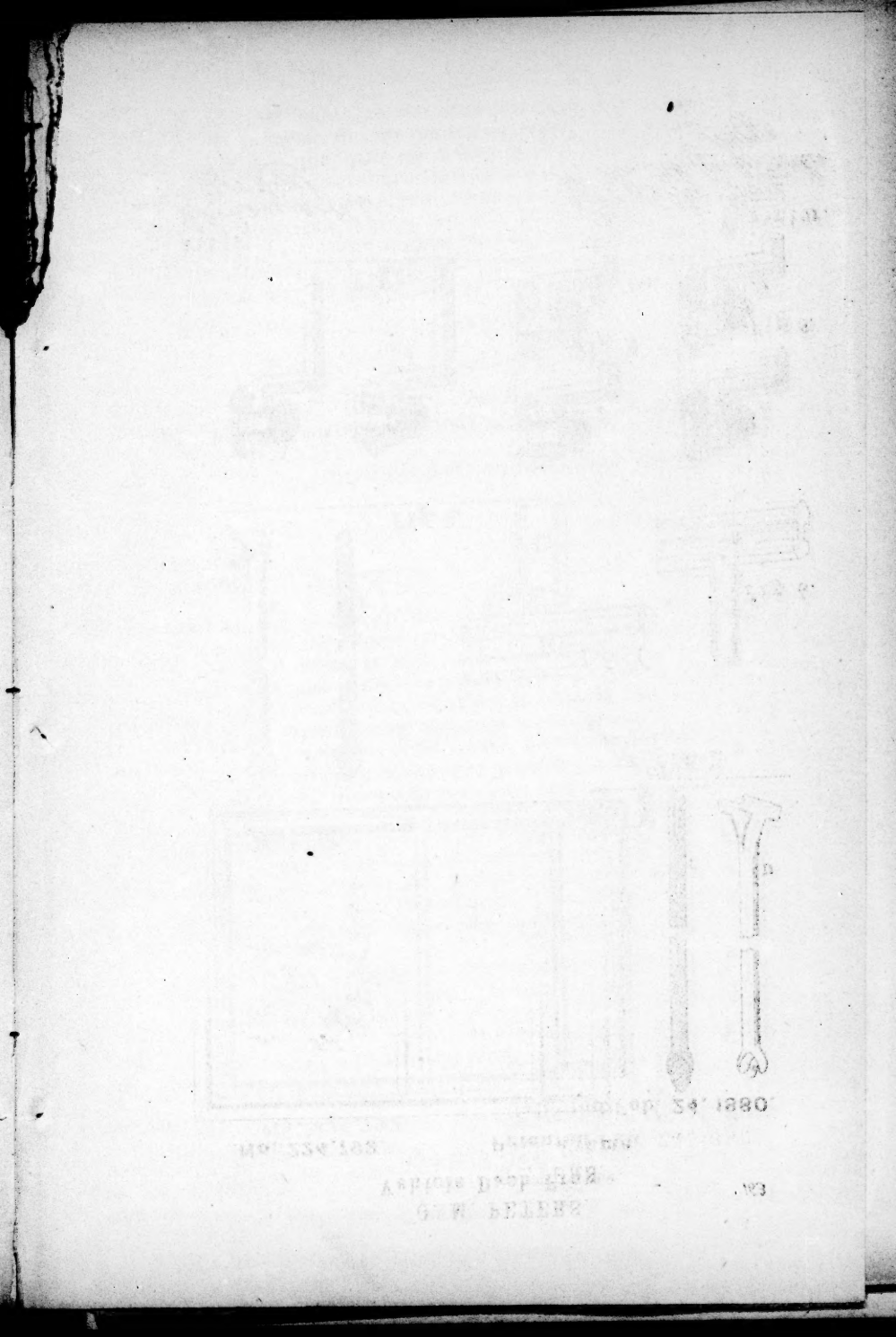
Fig. 3.

Fig. 4

Fig. 5.

Attest.
R. H. Bouvier Jr.
E. R. Kidd.

Inventor.
George M. Peters
per Wm. Hubbell Fisher
Atty



suit nor otherwise interested in the result thereof, and that my fees for taking said depositions are $11.00, and that the same has been paid me by the defendant.

I further certify that a witness fee of $1.50 was paid each of said witnesses by the said defendant.

In testimony whereof I have hereunto set my hand and
165 seal, at Cincinnati, this 20th day of January, 1885.

EDWARD W. RECTOR,
Notary Public and Special Examiner.

(Cost of Exhibit "Patent File," $9.50.)
6 exhibits.

166 Circuit Court of the United States for the Southern District of Ohio. In Equity.

GEO. M. PETERS
vs.
ACTIVE M'F'G CO. } Nos. 3630.

The complainants will take notice that the defendants will examine witnesses in the above-named cause, under the 67th rule in equity, as amended, before E. W. Rector, Esq., notary public and special examiner, at the office of Stem & Peck, No. 74 W. 4th street, Cincinnati, O., on Friday, the 16th day of January, 1885, beginning said examination at 10 o'clock a. m. of said day and continuing from day to day until completed.

STEM & PECK,
Solicitor- for Def't.

Received copy.
January 12, 1885.

WM. HUBBELL FISHER,
Of Solicitors for Compl't.

167 And afterward, to wit, on the 7th day of February, in the year last aforesaid, an entry was made upon the journal of the court aforesaid in this cause, and which said entry so as aforesaid made is clothed in the words and figures as follows, to wit:

GEORGE M. PETERS
vs.
THE ACTIVE MANUFACTURING CO. } In Equity. 3630.

This day came complainant, by his attorney, and asked the court for additional time to take testimony in rebuttal.

The court, being fully advised, doth grant the complainant two weeks longer time from the expiration of the twenty days heretofore given in which to take testimony in rebuttal.

And afterward, to wit, on the 21st day of February, in the year last aforesaid, came the said complainant herein aforesaid, by his said solicitor aforesaid, and filed in the clerk's office of the court

aforesaid in this cause certain depositions theretofore taken on behalf of said complainant, and which said depositions so as aforesaid filed are in the words and figures clothed as follows, to wit:

168 Circuit Court of the United States for the Southern District of Ohio. In Equity.

GEORGE M. PETERS
vs.
THE ACTIVE MANUFACTURING COMPANY. } No. 3630.

The respondent will take notice that the complainant will examine witnesses in the above-named cause, under the 67th rule in equity, as amended, before Ira H. Crum, Esq., special examiner and notary public, at the office of J. W. Firestone, 85 S. High St., Columbus, Ohio, on Wednesday, the 11th day of February, 1885, beginning said examination at 9 o'clock a. m. of said day and continuing from day to day until completed.

J. W. FIRESTONE,
Solicitor for Comp.

Received copy.

STEM & PECK,
Solicitor- for Def'ts.

169 Circuit Court of the United States for the Southern District of Ohio. In Equity.

GEORGE M. PETERS
vs.
THE ACTIVE MANUFACTURING COMPANY. } No. 3630.

Examination of witnesses on behalf of the complainant, under the 67th rule in equity, as amended, pursuant to the annexed notice.

Present: Jason W. Firestone, for the complainant, and —— ——, for the respondent.

By request of parties, it is ordered that the depositions be taken by question and answer.

—— ——, a witness produced on behalf of the complainant, being first duly sworn, deposeth and saith, in answer to interrogatories propounded to him by JASON W. FIRESTONE, Esq., of counsel for the complainant, as follows:

Ques. 1. State your name, age, residence, and occupation.

Ans. My name is Thomas Black; my age is 28 years; my residence is Columbus, Ohio, and I am now assistant foreman in the iron-finishing department of the Peters Dash Company.

Ques. 2. Have you a trade; and, if so, what; and how long have you been working at your trade?

170 Ans. Yes; I am a carriage blacksmith. I commenced in 1874, and have been working at my trade as a carriage blacksmith and carriage dash-maker ever since.

Ques. 3. Are you acquainted with the defendants, The Active Manufacturing Company of Cincinnati, Ohio?

Ans. Yes; I formerly worked for that company at Cincinnati, Ohio. I commenced early in the spring of 1879 and worked until in the fall of that year.

Ques. 4. What did you work at for said company?

Ans. I had charge of the dash-frame department; making the iron dash frames.

Q. 5. Were you familiar with and do you now know the kind of tools and the shape of the iron used by the Active Manufacturing Company in 1879?

Ans. Yes.

Ques. 6. Please state the shape of the iron they used in making the lower bar of their dash frames.

Ans. They used a flat bar-iron about ¼ x 1 inch.

Ques. 7. What do you mean by "flat bar?"

Ans. I mean a plain bar of iron, as distinguished from a channel bar, as are ordinarily used for making the lower bar of a footless dash frame.

Ques. 8. While working for the Active Manufacturing
171 Company in 1879, did it or not use channel bar-iron?

Ans. No, sir.

Ques. 9. In 1879, when you worked there, did the Active Manufacturing Company use dies for welding their dash frames? And, if so, please describe the dies.

Ans. They did use dies with a plain groove in to receive the flat iron bar and an oval groove to receive the oval iron to which the flat iron was welded.

Q. 10. Please examine "Defendant's Exhibit C" and state whether or not the Active Manufacturing Company used a die or dies like said exhibit in 1879.

Ans. No, sir; they did not while I worked there.

Ques. 11. Please state how the dies you used differed from the exhibit.

Ans. Without reference to the size of the grooves, the dies differed in this, that the dies they then used did not have the tongue in as shown in this die here (witness here refers to Defendant's Exhibit C," Ira H. Crum, examiner), but that tongue was taken out and the flat bar was laid flat in the groove of the die.

This die (witness refers to "Defendant's Exhibit C," Ira H. Crum, Ex.) I judge was made for welding channel iron such as is now in use by dash-makers, and it could not be used for the old flat iron
bar as used by the Active Manufacturing Company when I
172 worked there.

Ques. 12. What openings, if any, did the Active Manufacturing Company make in the lower bar for receiving the bolt which connects the dash foot to the dash.

Ans. They punched a square hole through the flat bar-iron at each end of the dash frames.

Ques. 13. Did or did not the lower bar of dash frame have any

perforation in the flat surface to make the flat iron thinner where the holes were to be punched?

Ans. No, sir; the iron was left flat, and after the welding the holes were punched through the flat surface.

Q. 24. Please examine "Defendant's Exhibit C" again, and, from the shape of the die, what weld is said die adapted to make in welding a dash frame?

Ans. From the shape of the die it could be used for making no other weld than that of welding the center bar of the dash frame to the lower bar.

Q. 15. Why could it not be used for making the corner weld of the dash frame?

Ans. To make the corner weld of a dash frame the tongue in the die would have to be cut away so as to receive the oval iron—that is, the groove like that made to receive the oval iron would have to be cut through the tongue and the end of the die closed to
173 prevent the metal from flowing away from the weld and thereby make an imperfect weld.

Ques. 16. Have you had any experience as a dash-maker in welding dash frames by use of dies like the dies shown in the drawing of "Complainant's Exhibit No. 3," being Peters patent No. 281,553, which I now hand you for examination of the drawing?

Ans. Yes, sir; I have seen them used.

Ques. 17. In practical use what advantage, if any, do you find dies made like those shown in the drawings of said patent have over the dies you have heretofore described and used?

Ans. This die in the drawing has a tongue which, in using channel bar-iron for the lower bar, fits into the channel of the bar and prevents the metal from filling in the channel where the hole is to be punched, and also swages the metal out toward the weld and makes a full weld and makes the corner of the dash strong just where breakage is liable to occur. In using channel bar-iron, if the tongue was not in the die the channel would fill up and the lower bar would be as hard to punch as the old flat bar we used to use before the channel bar came into use, and the advantages the channel bar has would be destroyed, and a complete weld could not be made, for the metal would run down the channel and away from the corner and
174 make an imperfect weld.

Q. 18. What kind of a die did the Active Manufacturing Company use for making the welds of the corner of their dash frames when you worked there?

Ans. They used a die with a groove to receive the lower flat bar and another groove at right angles *is* this to receive the oval iron, the same as the die used for welding the center bar, except closed at one end.

Ques. 19. Do you know of anything else of interest to either of the paties to this suit? If so, state fully.

Ans. No, sir.

THOMAS BLACK.

The further taking of these depositions is now adjourned until nine o'clock to-morrow morning.

IRA H. CRUM,
Notary Public & Ex.

Met, and taking of depositions resumed, pursuant to adjournment.

Present: Same parties.

IRA H. CRUM,
N. P. & Ex.

175 Also LUCIUS WALTON, a witness produced on behalf of the complainant, being first duly sworn, deposeth and saith, in answer to interrogatories propounded to him by JASON W. FIRESTONE, Esq., of counsel for the complainant, as follows:

Ques. 1. State your name, age, residence, and occupation.

Ans. My name is Lucius Walton; my age is 36 years; my residence, Columbus, Ohio, and I am a carriage blacksmith.

Ques. 2. How long have you been working at your trade as a carriage blacksmith, and what is your present business?

Ans. I have been working at my trade for about nineteen years, and am now and have been for several years foreman in the dash-frame making department*ment* of the Peters Dash Company.

Q. 3. Have you or not ever used dies for welding dash frames?

Ans. Yes, sir; have welded thousands of frames by using dies.

Q. 4. What kind of frames?

Ans. Frames with lower bar made of channel iron, and other parts oval iron, and others with flat bar-iron.

Ques. 5. What kind of dies did you use for welding dash frames where the lower bar was made of flat bar-iron?

176 Ans. I used dies with plain gutters or grooves to receive the flat and oval iron.

Q. 6. For whom were those dashes made, and were the dashes footless or not?

Ans. They were made for the Peters Dash Company, and were footless dashes.

Q. 7. Was there anything in those dies to make a depression in the lower flat bar where the hole or slot was to be punched to receive the bolt for the foot?

Ans. No.

Q. 8. Did you find any difficulty in punching holes or slots to receive the bolts in the flat bar; and, if so, what difficulties, if any?

Ans. In punching holes or slots in the flat bar, when the iron is cold, it crystallizes and becomes hard, and when attempting to punch same the iron has a tendency to follow the punch and to draw in toward the punch and splits the iron and destroys the lower bar, and we spoiled thousand- of dashes and broke many punches in attempting to make slots, and always had this difficulty until we adopted another kind of a lower bar for our dash frame, and made other dies for doing the welding.

Q. 9. What kind of iron did you adopt?

Ans. Mr. Peters got up the idea of using channel bar-iron
177 for the lower bar of our dash frame, so that we could punch the hole or slot to receive the bolt more -asily by punching through the channel part of the bar instead of through the thick bar-iron, as before.

Q. 10. You spoke of making a change in your dies; what change did you make?

Ans. After substituting channel iron for flat bar for the lower bar we found that our plain dies were inoperative—they would not do to make a proper weld—for when attempting to make a corner weld with our old dies with plain grooves we found that in making the weld the metal would flow away from the corner and fill up the channel of the iron and make an imperfect weld, because when heated the iron would flow away from the corner, where the strength is required. Mr. George Peters then invented the dies now in use, with a tongue in the die. This tongue fits into the channel of the channel bar-iron, and in making the weld keeps the channel perfect and from filling with metal, and prevents it and forces the iron out to the corner and makes a complete weld. The tongue also forces the web in the channel down to a level with the under surface when welding, so that there is a perfectly flat surface
178 on the under side of the lower bar, so that when punched for slots or holes the punch goes through it, strikes a flat surface, and don't cock up the edges of the bar, because it has a flat surface to punch on.

Q. 11. Please examine the drawings of letters patent No. 281,553 of George M. Peters, being "Complainant's Exhibit No. 3," and state how, if at all, the dies in said drawing compare with the dies with the tongue that you have described in your last answer.

Ans. The bottom corner dies in the drawing are the same as the ones I have described.

Q. 12. In your answer to question 10 you said "the metal would flow away from the corner, fill up the channel, and fill up the channel of the iron, and make an imperfect weld" by using the old dies without a tongue; can you produce a piece of iron illustrating your meaning and point out the defects?

Ans. Yes. Here is a corner iron which I attempted to weld in a die with a plain impression; that is a die without a tongue, and you see the channel of the channel is filled with metal which flowed away from the corner into the channel in making the weld,
179 and the channel is filled up and destroyed, and it would be as hard to punch a slot through this piece as though the channel iron had not been used, and the advantage of using channel iron in the lower bar is destroyed.

In this piece the weld is imperfect, because the metal flowed away from the corner, where it is wanted, into the channel and made a weak and imperfect corner.

Witness here produced piece of iron referred to in his last answer, which counsel now offers in evidence and asks the notary to mark

it Walton Exhibit X (which is accordingly done.—I. H. C., No. P., Ex.).

Ques. 13. In answer to question 10 you say "the tongue also force the web in the channel down to a level with the under surface when welding," &c. Can you produce a piece of iron illustrating your meaning? If so, do so and explain the same fully.

Ans. Here is a piece. It is a lower corner that I welded as we make them now. It shows the use of the tongue in the die for preserving the channel and forcing the iron out to the corners, where it is needed to make a perfect weld, and also of forcing the web
180 in the channel down to a level with the under surface, so that there is a perfect flat surface on the underside, where the slot is to be punched. This is all done by one heat.

It also shows how easily a hole or slot can be punched through the web when the channel is perfectly preserved, as when welded by use of a die with a tongue.

Witness here produced the corner iron referred to in his last answer, and complainant's counsel here offers the same in evidence and asks the examiner to mark it Walton Exhibit Y (which is accordingly done.—I. H. C., N. P., Ex.).

The further taking of these depositions is here adjourned until tomorrow morning, at nine o'clock.

IRA H. CRUM,
Notary Public & Special Examiner.

Met, and taking of depositions resumed, pursuant to adjournment.

Present: Same parties.

I. H. CRUM,
N. P. & S. Ex.

181 Q. 14. In your previous testimony you have explained the use and value of the dies as shown in the drawings of Complainant's Exhibits No. 3, being Peter's patent sued on in this case. You may state whether you have made any experiments in welding flat bar-iron to oval irons at right angles to make the lower corner of a dash frame with the dies as shown in said drawings and as you have heretofore described. And, if so, can you produce samples illustrating the result of your experiments?

Ans. Yes. I took flat bar-iron the same as we used to use for the lower bar of the dash frame before channel bar came into use for that purpose and welded several pieces to oval iron by using the same dies I use for welding channel iron, as I have heretofore explained, and find that the tongue of the die operates as successfully in welding flat bar-iron as in welding channel bar. I have here with me several samples of the welds I made by using flat bar-iron in the dies I use for welding channel bar-iron. In each of these samples you will see that these dies in which these welds were made

are adapted for welding channel bar-iron. Consequently,
182 where these samples were in the die, they received the same impressions that are given our channel bar-iron. Consequently you see there are depressions in these samples, giving them the appearance of channel bar-iron, as that part of the depressions in the samples, about two and five-eighths inches on the lower bar from the out corner of the angle, are formed by that part of the die which is made to preserve the web and channel when using channel iron.

Witness here produces the two samples referred to in his last answer, and counsel for complainant offers the same in evidence and asks the examiners to mark them Walton's Exhibit W, which is accordingly done.

IRA H. CRUM,
N. P. & Ex.

183 Q. 15. Please examine "Defendant's Exhibit C" and state whether or not the lower corner weld of a dash frame could be made by using dies constructed like said exhibit. And, if not, why not, and what, if any, weld of a dash frame could be made with such dies?

Ans. The lower corner weld of a dash frame could not be made, because the impressions and tongue runs clear across the die, and there is no impression across the tongue to allow the oval iron to lap onto the lower bar; but, in order to make a weld, the impression for receiving the oval iron would have to extend through the tongue, and the impressions on each side of the tongue should not expend clear across the die and should not extend any further than the outer edge of the impression for the oval iron. This die is made for welding the center bar of the dash frame to the lower channel bar.

Q. 16. Do you know anything of interest or importance to either of the parties to this suit? If so, state fully anything you may desire to add.

A. I do — know of anything further.

LUCIUS WALTON.

184 STATE OF OHIO, }
County of Franklin, } *ss:*

I, Ira H. Crum, a notary public within and for said county, selected to act as special examiner, under the 67th rule in equity, as amended, in the cause stated in the caption, do hereby certify that the foregoing examination was had, pursuant to the annexed notice, at the office of J. W. Firestone, 85 S. High St., Columbus, Ohio, on the 11th, 12th, and 13th days of February.

I further certify that at the said time and place I was attended by Thomas Black and Lucius Walton, witnesses produced on behalf of the complainant, they being of sound mind and lawful age, and the said witnesses being, previously to the commencement of their depositions, by me duly cautioned and solemnly sworn to testify the truth, the whole truth, and nothing but the truth, and the deposi-

tions hereinbefore appearing were by me reduced to writing in the presence of and read over by me to said witnesses, and were thereupon subscribed by them in my presence.

185 I further certify that I am not of counsel nor attorney nor relative of either of the parties to this cause, nor in any manner interested in the result thereof.

In testimony whereof I have hereunto set my hand and affixed my seal of office this 13th day of February, 1885.

[SEAL.] IRA H. CRUM,
Notary Public and Special Examiner.

Costs of taking depositions:

Notary fees	$10 00
Witness fees:	
Thomas Black, 1 day	1 50
Witness fees:	
Lucius Walton, 2 days	3 00 .
Total	$14 50

Paid by complainant.

IRA H. CRUM,
Notary Public and Special Examiner.

186 And afterward, to wit, on the 23d day of February, in the year last aforesaid, came the complainant herein aforesaid, by his said solicitors aforesaid, and filed in the clerk's office of the court aforesaid in this cause certain depositions theretofore taken on behalf of said complainant, and which said depositions so as aforesaid filed are clothed in the words and figures as follows, to wit:

187 Circuit Court of the United States for the Southern District of Ohio. In Equity.

GEORGE M. PETERS
vs.
THE ACTIVE MANUFACTURING COMPANY. } No. 3630.

Examination of witnesses on behalf of the complainant, under the 67th rule in equity, as amended, pursuant to the annexed notice.

Present: Jason W. Firestone, for the complainant, and ——— ———, for the respondent.

By request of parties, it is ordered that the depositions be taken by question and answer.

CHARLES H. DOTY, a witness produced on behalf of the complainant, being first duly sworn, deposeth and saith, in answer to interrogatories propounded to him by JASON W. FIRESTONE, Esq., of counsel for the complainant, as follows:

Question 1. State your name, age, residence, and occupation.

Answer. Charles H. Doty; residence, Columbus, Ohio; age, twenty-seven years; occupation, machinist and die-maker.

Question 2. How long have you worked at your present trade of machinist and die-maker, and what is your present position?

188 Ans. About seven years; am now foreman.

Q. 3. As a die-maker, what experience have you had in making and designing dies, and what kind of dies have you made and designed, if any?

Ans. I have made and designed various kinds of dies, principally for use in the manufacture of carriages and carriage dashes and stamping dies and trimming dies for cutting of- the surplus metal after forging or around the forging.

Q. 4. Please examine drawings, Figs. 1 and 2, of letters patent No. 281,553, to George M. Peters, and state whether or not you understand said drawings.

A. I have examined them and I understand them.

Q. 5. Have you had any experience in making dies as illustrated by said drawing-?

Ans. I have. I have made them for the Peters Dash Company.

Q. 6. In your experience have you ever made or seen dies with a tongue for making a depression in the metal?

Ans. None previous to the ones I made for the Peters Dash Company like the drawing.

Q. 7. What advantage do you find, if any, a die constructed like Figs. 1 and 2 of the drawing possess over other dies with which you are familiar?

189 Ans. The advantage in figure one is that the two tongues approaching near to each other tend to preserve the web in the channel when using channel iron, and to utilize what little metal might be there in filling the impression for the sides of the channel, and also force the metal out into the corner and makes a complete corner weld.

In using a flat bar instead of a channel bar iron, the web will be formed so as to be easily punched out without breaking the weld of the iron at the corner or without breaking the iron and greatly reducing the liability of punches to break.

Figure two possesses all the advantages I have mentioned above, and, in addition, by the use of the one tongue only, and this tongue in the upper die, forces the web, in using channel bar-iron, down to a flat surface on one side, thereby permitting the use of a straight-faced die for punching the slot, which prevents the sides of the channel bar from twisting or cocking up.

In using a flat bar-iron the result is the same.

Q. 8. As a die-maker, if a piece of channel and of oval was brought you for you to make a die, wherein said pieces could

190 be welded together at right angles so as to possess the advantages you have heretofore stated, that a die like that illustrated by the drawing possesses, would you have any difficulty in making such die?

Ans. Since seeing the drawings a die-maker would have no difficulty in making the dies, but without seeing the drawings or hav-

ing the design fully explained a die-maker would consider it difficult to make a die possessing the advantages of this one, and, as a matter of fact, dies for making dash corner welds without these advantages had been made for a long time previous to this idea being developed by Mr. Peters.

Q. 9. Do you know of anything else of interest or importance to either of the parties to this suit?

Ans. I do not.

CHAS. H. DOTY.

191 Circuit Court of the United States for the Southern District of Ohio. In Equity.

GEORGE M. PETERS
vs.
THE ACTIVE MANUFACTURING COMPANY. } No. 3630.

The respondent will take notice that the complainant will examine witnesses in the above-named cause, under the 67th rule in equity, as amended, before Ira H. Crum, Esq., notary public and special examiner, at the office of J. W. Firestone, No. 85 S. High St., Columbus, Ohio, on Saturday, the 21st day of February, 1885, beginning said examination at 9 o'clock a. m. of said day and continuing from day to day until completed.

J. W. FIRESTONE,
Solicitor for Company.

Received copy.

STEM & PECK,
Solicitor for Def't.

192 STATE OF OHIO, } *ss:*
County of Franklin

I, Ira H. Crum, a notary public within and for said county, selected to act as special examiner, under the 67th rule in equity, as amended, in the cause stated in the caption, do hereby certify that the foregoing examination was held, pursuant to the annexed notice, at the office of Jason W. Firestone, No. 85 S. High St., Columbus, Ohio, on Saturday, the 21st day of February, A. D. 1885.

I further certify that at the said time and place I was attended by Chas. H. Doty, a witness produced on behalf of the complainant, he being of sound mind and lawful age, and the said witness was, previously to the commencement of his deposition, by me sworn, cautioned, and solemnly sworne to testify the truth, the whole truth, and nothing but the truth, and the deposition hereinbefore appearing was by me reduced to writing in the presence of and read over by me to said witness, and was thereupon subscribed by said Chas. H. Doty in my presence.

I further certify that I am not of counsel nor attorney nor relative of either of the parties to this cause, nor in any manner interested in the result thereof.

193 In testimony whereof I have hereunto set my hand and affixed my seal of office this 21st day of February, 1885.

[SEAL.] IRA H. CRUM,
Notary Public and Special Examiner.

Costs, witness fee:

Chas. H. Doty, one day	$1 50
Notary fee	2 00
Total	$3 50

Paid by George M. Peters.

IRA H. CRUM,
Notary Public and Special Examiner.

194 And afterward, to wit, on the 26th day of February, in the year last aforesaid, came the said complainant herein aforesaid, by his solicitors aforesaid, and filed in the office of the clerk of the court aforesaid in this cause certain depositions theretofore taken on behalf of said complainant, and which said depositions so as aforesaid filed are clothed in the words and figures as follows, to wit:

195 Circuit Court of the United States for the Southern District of Ohio. In Equity.

GEORGE M. PETERS
vs.
THE ACTIVE MANUFACTURING COMPANY. } No. 3630.

The respondent will take notice that the complainant will examine witnesses in the above-named cause, under the 67th rule in equity, as amended, before Jno. W. Strehli, Esq., notary and special examiner, at the office of Wm. Hubbell Fisher, Esq., Nos. 12 and 13 Wiggins Bl'k, Cincinnati, Ohio, on Thursday, the fifth day of February, 1885, beginning said examination at eleven o'clock a. m. of said day and continuing from day to day until completed.

WM. HUBBELL FISHER,
Of Solicitors for Complainants.

Received copy.
Feb'y 3rd, 1885.

STEM & PECK,
Solicitor- for Respondent.

196 Circuit Court of the United States for the Southern District of Ohio. In Equity.

GEORGE M. PETERS
vs.
THE ACTIVE MANUFACTURING COMPANY. } No. 3630.

Examination of witnesses on behalf of the complainant, under the 67th rule in equity, as amended, pursuant to the annexed notice.

Present: Jason W. Firestone, for the complainant, and Arthur Stem, for the respondent.

By request of parties, it is ordered that the depositions be taken by question and answer.

Met on Feb'y 5, 1885.

The taking of the depositions in this case is, by consent, postponed to Feb'y 6th, 1885.

JNO. W. STREHLI,
Notary Public and Special Examiner, Hamilton County, Ohio.

CINCINNATI, O., *Feb. 6th*, 1885.

Met, pursuant to adjournment, at same place.

Present: Jason W. Firestone, for complainant, and Mr. Chas. M. Peck, for respondents.

197 JAMES MILLS, a witness produced on behalf of the complainant, being first duly sworn, deposeth and saith, in answer to interrogatories propounded to him by Mr. JASON W. FIRESTONE, of counsel for the complainant, as follows:

Ques. 1. State your name, age, residence, and occupation.

Ans. My name is James Mills; age, 45 years; residence, Cincinnati, Ohio; occupation, machinist.

Ques. 2. What experience have you had, if any, in making dies?

Ans. I have had two years' experience at Louis Cook's Carriage M'f'g — and 3 years besides at other places, and since these five years have been foreman for John Steptoe in building machinists' tools.

Ques. 3. How long have you been working at your trade as a machinist?

Ans. I have been working at it for 30 years; I commenced when I was 15 years old.

Ques. 4. Please examine the drawings of letters patent No. 281,553, being Complainant's Exhibit No. 3, and also models, Complainant's Exhibit No. 1 and No. 2, and state whether or not you understand the dies as shown in said drawing and models.

Ans. Yes, sir; I understand them.

Ques. 5. Wherein do the dies illustrated by said drawings and models differ, if at all, from dies that have heretofore been
198 used for the purpose of welding two parts together, and what advantage, if any, would dies constructed as shown in said drawing and as illustrated by the models — over other dies?

Objected to as incompetent and not in rebuttal.

Ans. The difference from the dies that I have made is in inserting this tongue in the die to form a slot in the piece welded, and also swedge in the corner to make it strong and have the most metal there; the tongue is also inclined towards the corner, which makes it still better for forming that corner; that is the difference from the dies I have made before for this purpose. Well, that advantage would be over other dies would be in welding the corner in one heat and also forming the slot therein in one heat.

Ques. 6. What would be the effect in attempting to weld a corner by joining a piece of channel and oval iron like that shown in Weadon's exhibit, if a die were used that did not have the tongue shown in the drawing of said patent?

Ans. The effect would be that you could not get as good a weld in the corner, as you have no way of swedging the iron there (not as good a way) as you have with the tongue, for the tongue has
199 a tendency to swedge the iron in the corner; therefore it makes a better weld than it does if it had not the tongue there, and to get the slot there you would have to take some other process or another heat to get it there.

Ques. 7. In the absence of the tongue in making the weld what would become of part of the metal that should go to form the corner?

Ans. Well, that depends a good deal on the man that is making the weld, in holding the iron while the die comes down; if he holds it in the proper place he can make a good weld, but if he does not, he does not make so good a weld as he would with the tongue, because the tongue helps him to swedge that, and therefore it assists him in making his weld, if he should not get it together just right.

Ques. 8. In welding a piece of channel and oval iron at the corner by use of dies like Complainant's Exhibit No. 1 without the tongue, would or not the metal that should go to make up the corner naturally flow away from the corner out into the channel of the channel bar-iron and thereby make an imperfect weld?

Objected to as leading.

Ans. I should naturally think it would, as the tongue being there it has a tendency to prevent it from doing so.

200 Ques 9. As a die-maker do you or not often experience difficulty in attempting to form dies for making certain welds where the person for whom the die is made is unable to give you an idea as to the shape of die necessary to form the weld?

Ans. Yes, very often that is the case; when he brings his dies he generally brings a sample of what he wants to weld. Any ordinary welding what we have been used to we have no trouble, but when he brings us a piece to weld and he wants it made in a certain way, we naturally ask him how we must make these dies, and if he has got anything to advantage he will tell us.

Ques. 10. As a die-maker do you consider that there is anything

new and novel in the construction of the dies as shown in the drawings of Exhibit No. 3; and, if so, what?

Objected to as incompetent.

Ans. Yes. What is new and novel is the insertion of that tongue in the die.

Cross-examination by Mr. CHAS. M. PECK, for respondents:

X Ques. 11. If anybody should bring to you a wooden pattern, showing the pieces as welded together in the shape he wanted them, would you have any trouble in making dies to perform such welding?

201 Ans. No; not at all.

X Ques. 12. You don't mean to say, as a die-maker, that you have never seen tongues in dies before, do you?

Ans. Not used for that purpose.

X Ques. 13. Aside from this particular purpose, tongues in dies are quite common and old, are they not?

Ans. Not to my knowledge, they ain't.

X Ques. 14. If anybody should bring to you a couple of pieces like Defendant's Exhibits A and B to be welded together to form a corner at right angles and to preserve the shape of each piece, would you, as a die-maker, have any trouble to make dies to do this?

Ans. I would have no trouble in making the die, but I can't say it would weld so good without the tongue as with it. As I said before, the tongue assists in welding that corner.

X Ques. 15. Would you have any trouble in putting in such a tongue if you found one was necessary?

Ans. No, sir. I would have no trouble in putting in the tongue, provided the man who wanted the die told me what he wanted. Of course there is no trouble in putting it in.

X Ques. 16. That is to say, if he told you he wanted the channel in the one piece to be preserved and to run up to the oval

202 piece, you would know enough about die-making to put in the tongue?

Ans. No. I don't think that would be my business at all; in fact, it has never come under my notice before. I can easy do it now, as I saw it.

X Ques. 17. Then your experience and knowledge of die-making has been merely to follow the directions of persons wanting dies and to copy patterns of such dies as were brought you?

Ans. Yes, sir; that's what all die-makers have to go by.

X Ques. 18. Are not tongues common expedients in making dies or swages where you want to make some depressions in metal or preserve some shape?

Ans. Yes; they are used for making depressions in metal, but not to make a weld and form the depressions at the same time, the same as this is (referring to the patent.)

X Ques. 19. How long has it been since you made dies?

Ans. It has been about two years since I made dies steady. I made some few dies since.

X Ques. 20. What kinds of dies were those that you made—for what class of business?

Ans. I have made dies for carriage-makers, chain-makers, Oliver dies, boat-makers' dies, and several other kinds.

JAMES MILLS.

203 Sworn to before me and subscribed in my presence this 6th day of Feb'y, 1885.

[SEAL.] JNO. W. STREHLI,
Notary Public and Special Examiner, Hamilton County, Ohio.

204 STATE OF OHIO, } ss:
County of Hamilton, }

I, John W. Strehli, a notary public within and for said county, selected to act as special commissioner, under the 67th rule in equity, as amended, in the cause stated in the caption, do hereby certify that the foregoing examination was had, pursuant to the annexed notice, at the office of Wm. Hubbell Fisher, Cincinnati, Ohio, on the 5th and 6th days of Feb'y, A. D. 1885.

I further certify that at the said time and place I was attended by Mr. James Mills, a witness produced on behalf of the complainant, he being of sound mind and lawful age, and the said witness was, previously to the commencement of his deposition, by me first duly cautioned and solemnly sworn to testify the truth, the whole truth, and nothing but the truth, and the deposition hereinbefore appearing was by me reduced to writing in the presence of and read over by me to said witness, and was thereupon subscribed by
205 him in my presence.

I further certify that I am not of counsel nor attorney nor relative of either of the parties to this cause, nor in any manner interested in the result thereof.

In testimony whereof I have hereunto set my hand and affixed my seal of office this 6th day of February, A. D. 1885.

[SEAL.] JNO. W. STREHLI,
Notary Public and Special Examiner, Hamilton County, Ohio.

Costs:

Witness	$2 50
Not'y fee	3 60
	6 10

Paid by complainant.

206 And afterward, to wit, on the 28th day of February, in the year last aforesaid, an entry was made upon the journal of the court aforesaid in this cause, and which said entry so as aforesaid made is clothed in the words and figures as follows, to wit:

GEORGE M. PETERS
vs.
THE ACTIVE MANUFACTURING CO. } In Equity. 3630.

This day came complainant, by his attorney, and asked for further time in which to take testimony in rebuttal.

The court, being fully advised, doth grant complainant two weeks' time from this date (viz., Feb. 28th, 1885) in which to take further testimony.

And afterward, to wit, on the 16th day of March, in the year last aforesaid, came the said complainant aforesaid herein, by his said solicitors aforesaid, and filed in the said the clerk's office of the court aforesaid in this cause certain depositions theretofore taken on behalf of said complainant, and which said depositions so as aforesaid filed are in the words and figures clothed as follows, to wit:

206½ Circuit Court of the United States for the Southern District of Ohio. In Equity.

GEORGE M. PETERS
vs.
THE ACTIVE MANUFACTURING COMPANY. } No. 3630.

The respondent will take notice that the complainant will examine witnesses in the above-named cause, under the 67th rule in equity, as amended, before Jno. W. Strehli, Esq., notary and special examiner, at the office of Wm. Hubbell Fisher, Esq., No. 12 and 13 Wiggins Bl'k, Cincinnati, Ohio, on Tuesday, the seventeenth day of February, 1885, beginning said examination at eleven o'clock a. m. of said day and continuing from day to day until completed.

WM. HUBBELL FISHER,
Of Solicitors for Complainant.

Received copy.
Cincinnati, Ohio, February 13th, 1885.

STEM & PECK,
Solicitor- for Respondent.

207 Circuit Court of the United States for the Southern District of Ohio. In Equity.

GEORGE M. PETERS
vs.
THE ACTIVE MANUFACTURING COMPANY. } No. 3630.

Examination of witnesses on behalf of the complainant, under the 67th rule in equity, as amended, pursuant to the annexed notice.

Present: Jason W. Firestone, for the complainant, and Arthur Stem, Esq., for the respondent.

By request of parties, it is ordered that the depositions be taken by question and answer.

CINCINNATI, OHIO, *Feb.* 17, '85.

By consent the taking of testimony in this case is postponed until to-morrow, Feb. 18th, 1885.

[SEAL.] JNO. W. STREHLI,
Notary Public and Special Examiner, Hamilton County, Ohio.

Met, pursuant to adjournment, on Wednesday, Feb'ry 18th, 1885.

Present: Same parties.

And WILLIAM MULLINGER, a witness produced on behalf
208 of the complainant, being first duly sworn, deposeth and saith, in answer to interrogatories propounded to him by JASON W. FIRESTONE, Esq., of counsel for complainant, as follows:

Ques. 1. State your name, age, residence, and occupation.

Ans. William Mullinger; age, 39 next March; residence, Cincinnati, Ohio; occupation, carriage blacksmith.

Ques. 2. Have you ever had any experience in the use of dies for welding different parts of metal, and also have you ever had any experience in desig-ing dies?

Ans. I think I was the first man who had the dies made for power hammer, in Cincinnati, in the carriage business. I have had experience in designing dies.

Ques. 3. Please examine drawings, pgs. 1 & 2, of patent No. 281,553, granted to Geo. M. Peters, and state whether or not you understand the construction of the dies as illustrated by said drawings.

Ans. Yes, sir.

Ques. 4. In your opinion, what advantage, if any, would dies constructed, as shown in said drawings, have over other dies for making the lower corner weld of a dash frame?

Ans. The die is made in the correct way for making a good, strong, substantial job without wasting any stock.

209 Ques. 5. You will notice by the drawing that the die has a tongue. What advantage, if any, in your opinion, does a die thus constructed have for welding the lower corner of a dash frame over a die with a plain groove or one made without this tongue?

Objected to as irrelevant and not in rebuttal.

Ans. The advantage of the die with the tongue is that it will form a recess so that it will punch easy and not break so many punches and not bend the corner of the frame when punching.

Ques. 6. Please examine Defendant's Exhibit C and state what weld in a dash frame could be made by me of said die.

Ans. This is made to weld the center on the bottom, one or two bars.

Ques. 7. Can said die be used for welding the lower corner of a dash frame where the bottom bar is welded at right angles to the end or upright bar.

Ans. No, sir.

Cross-examination by Mr. ARTHUR STEM, for respondent:

X Ques. 8. You knew that tongues were used in dies for the purpose of making recesses in the metal before you ever saw this patent referred to, did you not?

Ans. No, sir.

210 X Ques. 9. When did you get up the first dies for carriage blacksmithing referred to?

Ans. The first set of dies I ever got up was a set of axle dies, to weld axles, which is called a step die.

X Ques. 10. When was this?

—. It has been 12 or 14 years ago; I could not say exactly.

X Ques. 11. In that case the dies were made to conform to the shape you wished to produce in the axle, were they not?

Ans. Yes, sir.

X Ques. 12. Didn't you know at that time that a projection in the die would make a corresponding depression in the metal forged by that die?

Ans. I don't know what you are getting at there, hardly.

X Ques. 13. I mean did you not know when you made the axle dies that any projection or extension in the die would produce a recess in the metal forged by the die?

Ans. No, sir.

X Ques. 14. Didn't you know that the metal took the same shape as the die?

Ans. I knew that a square piece would.

X Ques. 15. Well, if a square piece would, why would not a round piece or flat piece?

Ans. We never tried any but the square piece at that time.

X Ques. 16. Well, wouldn't any man skilled in metal working know that if metal was forged by a die or dies containing

211 projections like the tongue shown in these dies it would have depressions or recesses of substantially the same shape and size as the projections or tongues?

Ans. No, sir; we did not know that in those days.

X Ques. 17. Were you very skillful iron-workers at that time?

Ans. Yes, sir; we were reckoned as good as the rest of the people were, and made as many improvements.

X Ques. 18. Who is we?

Ans. Well, I made a little mistake there in saying "we." I meant myself.

X Ques. 19. Suppose I should bring you two pieces of iron like Defendant's Exhibits A & B and tell you I wanted dies made for welding them together at right angles, so as to preserve the channel, would you have any difficulty in making a pair of dies for that purpose, or would any other skilled die-maker or iron-worker?

Ans. No, sir; I should not have any trouble in making them, but a die-maker would; he wouldn't understand it.

X Ques. 20. Could you have done it before you saw the patent No. 281,553 to Geo. M. Peters?

Ans. No, sir.

X Ques. 21. When did you first see that patent?

212 Ans. This is the first time I ever seen it, I believe.

X Ques. 22. Then, if I had brought you these pieces of iron yesterday to have dies made to weld them together as described you couldn't have made them; is that the fact?

Ans. Yes, sir; I could have made them.

X Ques. 23. Then you could have made them before ever seeing this patent, could you not?

Ans. Yes, sir.

X Ques. 24. Who made the dies for Louis Cook for welding dash frames?

Ans. We had all our own dies made right in the shop. The way I would have them made would be, I would weld a corner up and finish it up, shape and size that I wanted, and give it to the machinist and have a set of dies made to make those welds.

X Ques. 25. You had no difficulty in making dies, then, of whatever shape you desired to fit the metal as welded, and so as to make the same kind of a weld in forging other pieces of iron together, did you?

Ans. Yes, sir; it was a deal of difficulty.

X Ques. 26. How do you mean difficulty. You knew what you wanted, did you not?

Ans. Yes, sir; I knew what I wanted, but it would not come out the same as the sample that I gave the die-maker,

213 because sometimes it would have a little too much stock & leave a fire in each side of the iron, which wouldn't let the dies come together.

X Ques. 27. Then the difficulty was in getting the dies just the right size so as to fit accurately the sample weld you furnished the die-maker, wasn't it?

Ans. Yes, sir.

X Ques. 28. You had no difficulty in telling the die-maker what shape you wanted the dies, had you?

Ans. The way I always had my dies made I always furnished a sample of what I wanted made.

X Ques. 29. Then, after the die-maker had the sample of what you wanted, all he had to do was to make the die in that shape, wasn't it?

Ans. To make it the shape of that piece I gave him; then I put the die in the hammer and tried a half a dozen pieces; if they did not come out right, I would have the dies changed until there came out what I wanted.

X Ques. 30. Did you ever have any dies made for welding channel iron?

Ans. No, sir.

X Ques. 31. If you wanted a die made for welding a piece of channel iron to a piece of flat or oval iron, all you would have to do would be to weld two pieces together as you wanted them,

214 and then give them to the die-maker to make dies just to fit the sample, and try them until they fit exactly, would it not?

Ans. Never had any occasion to have any made.

X Ques. 32. You would be able to do it, though, if you had, wouldn't you?

Ans. I would now.

X Ques. 33. What do you mean by "you would now?"

Ans. Because I had a set of dies made six months ago to make the end of a pump handle—pretty nearly the same or to answer the same purpose, but the difference in my dies, I punch mine from both sides and leave a very thin piece in the middle.

WILLIAM MULLINGER.

Sworn to before me and subscribed in my presence this 18th day of Feb'y, A. D. 1885.

[SEAL.] JNO. W. STREHLI,
Notary Public and Special Examiner, Hamilton County, Ohio.

215 STATE OF OHIO, } ss:
County of Hamilton, }

I, Jno. W. Strehli, a notary public within and for said county, selected to act as special commissioner, under the 67th rule in equity, as amended, in the cause stated in the caption, do hereby certify that the foregoing examination was had, pursuant to the annexed notice, at No. 13 Wiggins Bl'k, the office of Wm. Hubbard Fisher, Cin'ti, O., on Feb'y 18th, 1885.

I further certify that at the said time and place I was attended by William Mullenger, a witness produced on behalf of the complainant, he being of sound mind and lawful age, and the said witness being, previously to the commencement of his deposition, by me duly cautioned and solemnly sworn to testify the truth, the whole truth, and nothing but the truth, and the deposition hereinbefore appearing was by me reduced to writing in the presence of and read over by me to said witness, and was thereupon subscribed by him in my presence.

I further certify that I am not of counsel nor attorney nor relative of either of the parties to this cause, nor in any manner interested in the result thereof.

216 In testimony whereof I have hereunto set my hand and affixed my seal of office this 18th day of February, A. D. 1885.

[SEAL.] JNO. W. STREHLI,
Notary Public and Special Examiner, Hamilton Co., Ohio.

Notary fees	$4 00
Witness fees	2 50
	$6 50

Paid by compl't.

217 Circuit Court of the United States for the Southern District of Ohio. In Equity.

GEORGE M. PETERS
vs.
THE ACTIVE MANUFACTURING COMPANY. } No. 3630.

The respondent will take notice that the complainant will examine witnesses in the above-named cause, under the 67th rule in equity, as amended, before Jno. W. Strehli, notary and special examiner, at the office of Wm. Hubbell Fisher, Nos. 12 and 13 Wiggins Bl'k, Cincinnati, Ohio, on Monday, the ninth day of March, 1885, beginning said examination at 9.30 o'clock a. m. of said day and continuing from day to day until completed.

WM. HUBBELL FISHER,
Of Solicitors for Compl't.

Received copy March 6, 1885.

STEM & PECK,
Solicitor- for Respondent.

218 Circuit Court of the United States for the Southern District of Ohio. In Equity.

GEORGE M. PETERS
vs.
THE ACTIVE MANUFACTURING COMPANY. } No. 3630.

Examination of witnesses on behalf of the complainant, under the 67th rule in equity, as amended, pursuant to the annexed notice.

Present: Wm. Hubbell Fisher, for the complainant, and Chas. M. Peck, for the respondent.

By request of parties, it is ordered that the depositions be taken by question and answer.

CINCINNATI, OHIO, *M'ch* 9, 1885.

Adjourned by consent until to-morrow, M'ch 10, 1885.

JNO. W. STREHLI,
Notary and Examiner.

CINCINNATI, OHIO, *M'ch* 10, 1885.

Met, and adjourned until to-morrow.

JNO. W. STREHLI,
Notary & Examiner.

CINCINNATI, OHIO, *M'ch* 11.

Met pursuant to adjournment.

Present: Same parties.

219 RICHARD G. WOOD, a witness produced on behalf of the complainant, being first duly sworn, deposeth and saith, in

answer to interrogatories propounded to him by WM. HUBBELL FISHER, Esq., of counsel for the complainant, as follows:

Ques. 1. State your name, age, residence, and occupation.

Ans. Richard G. Wood; age, 39; residence, Cincinnati, Ohio; occupation, machinist, dash-maker, and buggy manufacturer.

Ques. 2. Do you know anything of the Active Manufacturing Company of Cincinnati, Ohio; if yea, have you ever visited their shops; and, if so, when?

Ans. I worked for the said company part of the winter of 1883 and 1884.

Ques. 3. While there at the time above mentioned what, if any, knowledge have you of the use of forging dies for making the corners of dash frames, as employed by the Active Manufacturing Company?

Ans. I am familiar with the corner dies they were using at that time and had been using some time before that and since then. I talked and consulted with Mr. Monteith about swaging the slot clear through at one welding heat. I advised him that it was impractical, but that he had better stick to the way he had been doing. I repaired the dies which they had been using right along.
220 The dies that they had been using to do their work with were constructed as follows: The dies had depressions for the channel iron, and also depressions for the oval iron; these two depressions in each die were joined at right angles. The depressions were about half way in each die. The lower die had a tongue for preserving the lower channel of the iron, and the upper die had a swaging tongue projecting about two-thirds. This tongue swages the seat down to a very thin shell, and at the same time forces the surplus metal to the corner and to the deepening depressions in the die; also thickening the beads of the channel bar towards the welded joint. They also had and used single-tongue dies for welding the same, as above, only it was for single channel iron; but these dies accomplished about the same results as the double-tongue dies.

Ques. 4. Were there or were there not depressions in the dies which you have described deeper at one point than at another? If yea, please state fully how these depressions were constructed.

Ans. There were depressions deeper at one point than at another in these dies used by them. The depressions in the dies
221 which received the channel bar were gradually deepened toward the depressions that received the oval bar.

Ques. 5. How do the sketches of dies now handed you, marked upper die and "lower die," compare with the dies which you have testified were used by the Active Manufacturing Company, with reference to the deepening of the depressions which received the channel bar?

Ans. The deepening of the depression in the dies used by the Active Manufacturing Company were about three-quarters of an inch in length, while in the sketches they are shown as about an inch and a half; otherwise about the same in depth.

Compl't, by his counsel, hereby offers in evidence the said sketches, and requests the notary to mark them, respectively, "Wood Upper-Die Sketch" and "Wood Lower-Die Sketch."

Ques. 6. How do the sketches, Wood Upper Die and Wood Lower Die, compare with the single-tongue dies which you testified were used by the Active Manufacturing Company?

Ans. They agree substantially with the dies used by the Active Manufacturing Company, except the incline in the depressions is only about three-fourths of an inch, while in the sketch it is
222 an inch and a half—in other words, more abrupt.

Ques. 7. Can you give the thickness of the iron, channel iron and oval iron, used by the Active M'f'g Co. in their dash frames?

Ans. The channel iron was one-quarter inch thick and the oval iron was five-sixteenth-; this channel iron was this thick at the heads.

Defendant's counsel now appears and objects to the entire deposition of this witness as incompetent, and declines to cross-examine.

RICHARD G. WOOD.

Sworn to before me and subscribed in my presence this 11th day of M'ch, 1885.

JNO. W. STREHLI,
Notary Public and Special Examiner, Hamilton County, Ohio.

Complainant's counsel now offers in evidence a certified copy of the articles of incorporation of the Active Manufacturing Company.

JNO. W. STREHLI,
Notary & Examiner.

(Here follow diagrams marked pp. 223, 224.)

225 COMPLAINANT'S EXHIBIT CERTIFIED COPY OF ACTIVE MANUFACTURING CO. OF ARTICLES OF INCORPORATION. [L. S.]
John W. Strehli, Notary Public & Special Examiner, Hamilton Co., Ohio.

In the United States Cir. C't, South. Dist. Ohio. In Equity.

PETERS
vs.
ACTIVE M'F'G CO. } No. 3630.

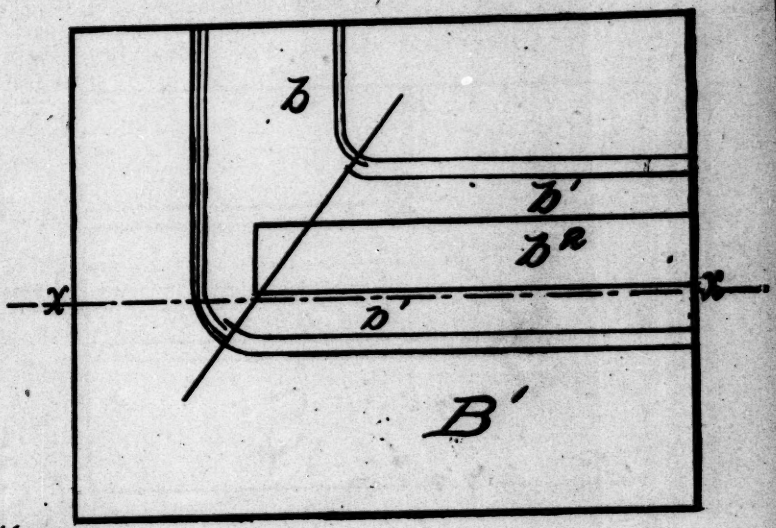
Active Manufacturing Company. Received and Recorded Feb'y 20, 1879.

Know all men by these presents that we, the undersigned, to associate together and become incorporated under the act of May 1st, 1852, and the acts supplementary and amendatory thereof, laws of Ohio, for the purpose of engaging in the business of manufacturing and selling specialties used in the making of vehicles and sewing machines for stitching heavy and bulky textile fabrics, and such other articles as these machines are adapted to produce, do hereby certify:

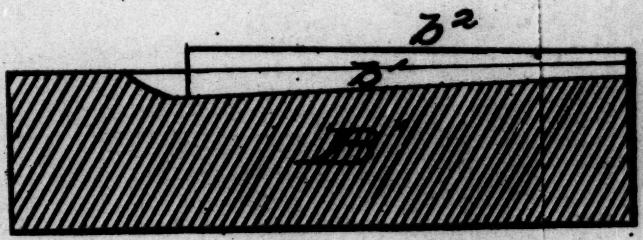
WOOD EXHIBIT UPPER DIE SKETCH.

UPPER DIE.

PLAN.



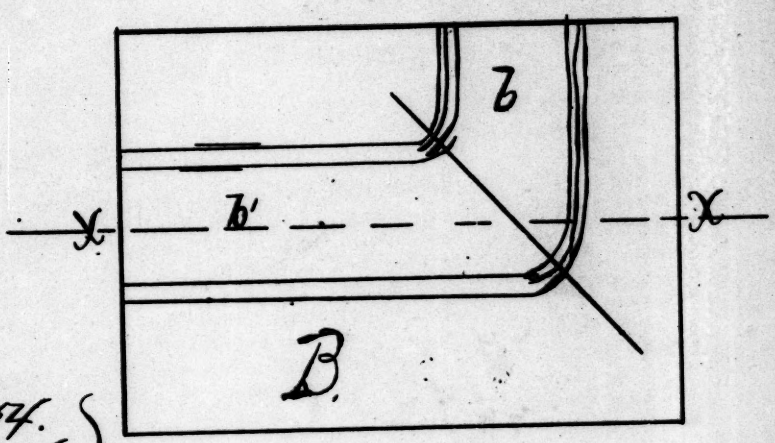
No. 2574.
Peters Arbor Mfg. Co.
p. 223.



SECTION ON LINE X X.

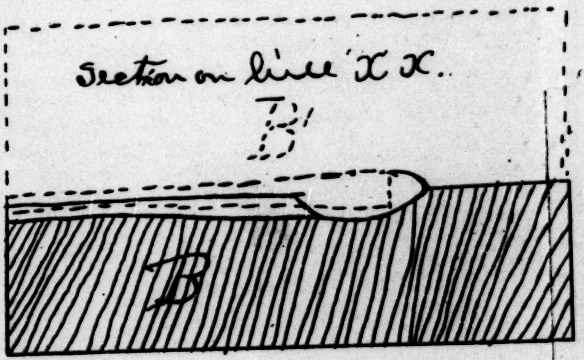
Wood Patent Lower Die Sketch

Lower Die
Plan



No. 2054.
Peters
Active
Mfg. Co.

p. 224.



1st. That the amount of capital stock necessary to carry on such business is thirty thousand dollars ($30,000).

2nd. That the amount of each share shall be one hundred dollars ($100).

3rd. That said manufacturing establishment shall be
226 located and do business in the city of Cincinnati, Hamilton county, Ohio; and,

4th. That the name of said company shall be "Active Manufacturing Company."

Witness our hands and seals this 15th day of February, A. D 1879.

D. H. SOUTHWORTH. [SEAL.]
GEO. MONTEITH. [SEAL.]
HENRY J. PAGE. [SEAL.]
EDWIN ALDEN. [SEAL.]
SAM'L F. GRIFFITH. [SEAL.]

STATE OF OHIO, *County of Hamilton*, } ss:

Be it remembered that on this 15th day of February, A. D. 1879, personally appeared before me, the undersigned, a notary public in and for said county, D. H. Southworth, Geo. Montieth, Henry J. Page, Edwin Alden, and Samuel T. Griffith, who signed the above certificates for incorporation, and acknowledged the signing and sealing thereof to be *there* voluntary act and deed for the uses and purposes therein mentioned.

In testimony whereof I have hereunto affixed my hand and notarial seal the day and year above written.

A. M. WARNER, [SEAL.]
Notary Public, Hamilton County, Ohio.

227 STATE OF OHIO, *Hamilton County*, } ss:

I, Lewis G. Bernard, clerk of the court of common pleas within and for said county of Hamilton, do hereby certify that A. M. Warner, whose name is signed to the certificate hereto attached, was at the time of subscribing the same a legally acting notary public in and for said county of Hamilton, duly commissioned and qualified, and that I am well acquainted with his handwriting and believe his said signature to be genuine.

In testimony whereof I have hereunto set my hand and affixed the seal of the said court, at Cincinnati, this 15th day of February, A. D. 1879.

[L. S.]

LEWIS G. BERNARD,
Clerk H. C., C. P.,
By JOHN H. GARRISON, *Deputy.*

UNITED STATES OF AMERICA, *Ohio:*

OFFICE OF THE SECRETARY OF STATE.

I, Milton Barnes, secretary of state of the State of Ohio, do hereby certify that the foregoing is a true copy of the certificate of incor-

poration of the Active Manufacturing Company, filed in this office on the 17th day of February, 1879, and recorded in vol. 18, pages 116, &c., Records of Incorporations.

228 In testimony whereof I have hereunto subscribed my name and affixed the great seal of the State of Ohio, at Columbus, the 18th day of February, A. D. 1879.

[Great Seal of Ohio.]

MILTON BARNES,
Secretary of State.

THE STATE OF OHIO, } ss:
Hamilton County, }

RECORDER'S OFFICE.

I, George Rabenstein, recorder within and for the county aforesaid, do hereby certify the foregoing to be a true and correct copy of articles of incorporation of the Active Manufacturing Company, received and recorded on the 20th day of February, 1879, in Book No. 4, page 459, Hamilton County, Ohio, Records.

In testimony whereof I have hereunto set my hand and affixed my official seal, at Cincinnati, this 9 day of March, A. D. 1885.

[L. S.] (Signed) GEORGE RABENSTEIN, *Recorder.*

229 And JAMES W. MCCURLEYS, a witness produced on behalf of the complainant, being first duly sworn, deposeth and saith, in answer to interrogatories propounded to him by WM. HUBBELL FISHER, Esq., of counsel for the complainant, as follows:

Ques. 1. State your name, age, residence, and occupation?

Ans. James W. McCurley; age, 38; residence, Cincinnati, Ohio; occupation, carriage-trimmer.

Ques. 2. Do you know anything of the Active Manufacturing Co. of Cincinnati, Ohio; if yea, have you ever visited their shops; and, if so, when?

Ans. Yes, sir; I know that there is a concern of that kind, and I have visited their shops; the last time I was there was of Feb'y 8th, 1884.

Ques. 3. While there at the time above mentioned, what, if any, knowledge have you of the use of forging dies for making the corners of dash frames as employed by the Active Manufacturing Company?

Ans. I examined their dies, which were placed in the power hammer ready for use, closely, and found them to consist of two grooves at right angles, one to receive the oval or upright bar, the other to receive the channel or lower bar of the dash frame. The groove to receive the channel or lower bar had a tongue in the middle

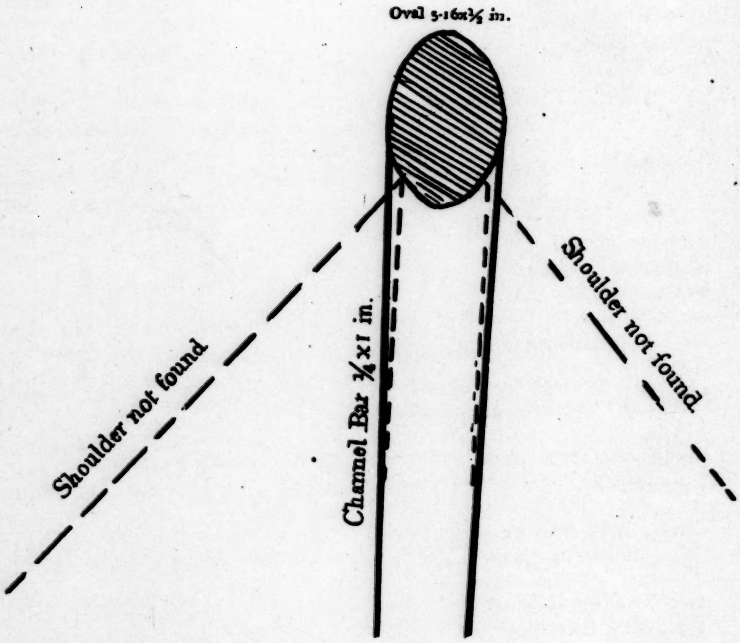
230 of said groove nearly the length of the groove.

Ques. 4. Were there or were there not depressions in the dies which you have described deeper at one point than at another? If yea, please state fully how these depressions were constructed.

Ans. At the junction of the two grooves the depression of the dies were of equal depth. As I passed my finger through the groove of the die to receive the channel or lower bar *and* found it to be the

McCURLEY EXHIBIT SKETCH

McCURLEY EXHIBIT SKETCH.



No. 254.
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Acme
Mfg Co.
p. 233.

same depth at the junction of the groove to receive the oval or upright bar. At the opposite end of the groove from the junction of the dies to receive the channel or lower bar the groove was not as deep as at the end where the junction was formed.

Ques. 5. Then, I understand that the depressions for the reception of the channel bar in the dies which you saw at the shops of the Active Manufacturing Company were gradually deepened toward their junctions with the depressions which received the oval bar. Please state fully how you knew this to be the case.

Ans. Yes, sir; I found the depression in the channel groove the same depth as in groove for the oval bar, at their junction, as I passed my finger through the groove which received the channel bar and found that there was no shoulder at the junction, which
231 would have been had the groove to receive the channel bar not been tapered down to the depth of the groove that received the oval bar. To explain more fully, I will now offer a sketch to show why there was no shoulder found in the groove of the channel bar.

The notary marks said sketch "McCurley's Exhibit Sketch."

Ques. 6. State whether or not you saw any dash frames in the shops of the said Active Manufacturing Company on said 8th day of Feb'y, 1884; and, if yea, state of what kind of bar-iron the lower bar of the dash frame was made.

Ans. Yes, sir; I saw quite a quantity of dash frame- in the shop at that time, and examined them closely to ascertain if the dies in the hammer corresponded with the impressions on the frame. The bar-iron used in the lower bar of the dash frame was made of double-channel iron, or iron channeled on both sides, and the upright and top bars were made of oval iron.

Ques. 7. What was the condition of the web at or near the lower corner?

Ans. The web showed the impressions of the dies in the hammer and seemed to be forged out thinner at the end where it had been under the tongue of the dies; the web also was recessed on one side and driven down out of the middle of the bar.

232 Ques. 8. Were these dies, when you saw them, in condition to be used?

Ans. Yes, sir; they were placed in position. It was evident that they had been using them the day previous, as the fresh scales of iron still remained in the dies, and I blew the scales out to examine them more closely.

Defendant's counsel now appears and objects to the entire deposition of this witness as incompetent, and declines to cross-examine.

J. M. McCURLEY.

Sworn to before me and subscribed in my presence this 11th day of M'ch, A. D. 1885.

JNO. W. STREHLI,
Notary Public and Special Examiner, Hamilton County, Ohio.

(Here follows diagram marked p. 233.)

234 And JOHN W. HILL, a witness produced on behalf of the complainant, being first duly sworn, deposeth and saith, in answer to interrogatories propounded to him by WM. HUBBELL FISHER, Esq. of counsel for the complainants, as follows:

Ques. 1. State your name, age, residence, and occupation.

Ans. John W. Hill; age, 36 years; residence, Cincinnati, Ohio; mechanical engineer.

Ques. 2. How are you engaged at the present time?

Ans. I am employed as consulting engineer to the Cincinnati water department and to several manufacturing corporations.

Ques. 3. What opportunities have you had for acquiring a familiarity with the construction and operation of machines and mechanical processes as variously used in the mechanic arts?

Ans. I have been constantly engaged in mechanical pursuits since July 5th, 1863, during which time I have served the usual apprenticeship as a machinist; served as tool-maker, draughtsmen, and superintendent of manufacturing establishments; have been employed in the construction of fire-arms, woolen-mill machinery, agricultural machinery, flour and paper-mill machinery, steam-engines and boilers, pumping machinery, and many special
235 machines. In my capacity as a professional engineer I have been and am now frequently employed to investigate and report upon the construction and operation of many different kinds of machinery, and have become familiar with many of the different machines and mechanical processes employed in the arts.

Ques. 4. What opportunities have you had for acquiring a knowledge of letters patent and of patented inventions and of the meaning and scope of the claims of letters patent?

Ans. I have at various times, during the past twelve years, prepared the drawing- and specifications for applications for letters patent; have prosecuted before the patent offices of this and other countries many applications for patents upon various mechanical constructions and processes, and have frequently been called upon to testify as an expert upon the intent and scope of the claims of letters patent and upon the patentable merits of patented inventions.

Ques. 5. Please state what, if any, experience you have had with the construction or use of swaging, forging, or forming dies for drop-hammers, presses, or standing machinery.

Ans. I have, during my experience in the various shops in which I have been employed, had frequent occasion to design,
236 construct, and operate swaging dies for drop-hammers and forming dies for presses.

Ques. 6. Please examine letters patent No. 281,553, granted to Geo. M. Peters, of Columbus, Ohio, for improvements in "dies for making dash frames," and state if you understand the invention therein described and claimed.

Ans. I have examined the patent referred to in the question, and believe that I understand the invention therein set forth.

Ques. 7. Please state what is the function of the invention de-

scribed in the specification and set forth in claims one and two of said patent.

Objected to as incompetent.

Ans. The invention recited in claim one of said patent to Peters, No. 281,553, consists "of two dies having opposing angularly joined depressions *a a'* and a tongue, a^9, in the depression *a'* of either or both dies." Referring to the specification and drawing of the patent, these dies are designed to simultaneously weld together two bars of iron of different sections, and in one of these bars to sink a recess or recesses to facilitate the punching of the hole through which is passed the bolt which secures the dash foot to the frame.

237 The invention recited in claim two is similar to the invention recited in claim one, excepting "the depressions *a'* (in the two dies) deepen toward their junction with the depressions *a*." The dies recited in this claim *the dies recited in this claim* are designed to simultaneously weld together two bars of iron of different sections, and at the same operation sink a recess or recesses in one of said bars to facilitate the punching of the hole through which is passed the bolt which secures the dash foot to the frame; and, in addition to these functions, to thicken the metal in one of these bars at and toward the welded joint.

Ques. 8. You have stated that the invention recited in claims one and two of complainant's patent is designed to weld together two bars of iron of different section-, and at the same operation form recesses in one of said bars to facilitate the punching of the bolt hole for attachment of the dash foot. Referring to your knowledge of the state of the art in swages and dies, what constitutes the novel feature or features in these dies?

Ans. The arrangement of the angularly joined depressions *a a'* and the tongue or tongues in depressions *a*, whereby the simultaneous performance of two separate and independent operations is accomplished—first, the welding together of two iron bars of different sections, and, second, the recessing of one of said bars. I was at one time very familiar with the use and construction of swaging dies for gun and pistol work, in which there were many odd forms for forging body pieces—levers and plugs of breech-loading fire-arms—but I never before have seen dies which were at one operation capable of performing the double function of making a weld of two bars of iron of different sections and recessing one of the bars.

238

Ques. 9. Several witnesses for the defense in this case have testified that dies with "depressions" for the two bars of iron used in the corners of dash frames, and with the "tongue" to produce the "recess" or "recesses" in one of the bars, were easy of construction, and that they involved no novelty, from the fact that any ordinary die-sinker could make them after the requirements of the dies were explained to him. What do you say in regard to this?

Ans. I do not understand that the patentability of an invention is at all limited by the mechanical labor required to produce it. I have no doubt an intelligent die-sinker could make the dies

239 described in the patent with his information limited to the requirements of such dies, viz., a pair of dies which, while they will effect a weld of two bars of iron of different sections, will partially perforate or recess one of these bars, as described in the patent, but the invention, in my judgment, lies, not in the mechanical effort required to construct such a pair of dies, but in the genius which conceived their construction. The mere fact that the invention is simple is no argument against its patentability or its practical utility. Some of the most important inventions ever produced are of very simple construction, while some of the most worthless inventions are so intricate as to defy the skill of an ordinary mechanic in their construction.

Ques. 10. Please examine Respondent's Exhibit C and state whether, in your opinion, a corner weld of the oval and channel bars of a dash frame could be made by such dies.

Ans. I have examined the exhibit referred to in the question, and am clearly of the opinion that dies such as these could not be used to make the corner weld of a dash frame.

Ques. 11. What do you understand to be the object of deepening the depression- a' toward their junctions with the depressions
240 a, as recited in claim two of the patent of complainant?

Ans. I understand the deepening of the depressions a' as described to be for the purpose of increasing the thickness of the metal at and near the welded joint, as clearly shown in figure six of the patent. To exemplify this feature of the dies recited in claim two, referring to Wood Upper and Wood Lower Die Sketches (Exhibits). I find said sketches to be in accordance with the patent, showing the dies in plan and in longitudinal section, on line $x\ x$ of the plans. The red lines diagonally across the junctions of the recess $b\ b'$ indicate the axis of the joint between the two depressions $b\ b'$ of dies B B'.

Ques. 12. Suppose the tongue or tongues were of such form and dimensions as to simply preserve the form of the channel bar without recessing the web thereof, would such construction be embraced in claims one and two of the patent?

Ans. I think it would, because the tongue or tongues are employed either to form a recess or recesses in the lower rail of the dash frame; or, if this lower rail is of channel iron of "thin" web, then the tongues preserve the original form of the channel bar and prevent the metal at the welded joint from flowing into and "obliter-
241 ating" the channel at the point where the web of the bar is to be punched for the foot bolt, which point is opposite the tongue or tongues.

Ques. 13. Have you read the deposition of Geo. Monteith, a witness produced on behalf of respondents in this case? If yea, please state what form of dies you understand by his testimony was not used by defendants.

Ans. I have read the testimony of Geo. Monteith, and, referring to questions and answers two and three, I understand he denies the use by defendants of dies with tongues which were deeper at one point than at another, or dies in which the tongue or tongues were

inclined or the depressions deeper at one point than at another. I do not understand, however, from his deposition, that he denies the use of such dies as are described in claim one of the patent to Peters.

Ques. 13. What do you understand to be the function of the deepening of the depressions a' toward their junction with the grooves a of the dies described in claim two of complainant's patent?

—. The exhibits of corners of dash frames in this case show
242 that the thickness of the flanges or heads of the channel iron is less than the thickness of the oval iron, and the deepening of the depressions a' toward the depressions a, as recited in claim two, is to swage heads of the channel bar to an equal thickness with the oval bar at the welded joint.

Ques. 14. Do you or not regard this deepening of the depressions a' toward the depressions a of practical utility and involving invention, as described in claims two of Peters patent?

Objected to as incompetent.

Ans. In view of the general desire to reduce the cost of the necessities and conveniences of life, anything that accomplishes this end I am of the opinion is of practical utility. By reason of the deepening of the depressions a' toward the depressions a comparatively light channelir on can be used for the lower rail of a dash frame, the deepening of the depressions a' towards the depressions a effecting an "upset" of the metal in the heads or flanges of the channel iron at that point where the greatest strength and stiffness is required, viz., at the lower corner of the frame, where the web is to be punched or per-
243 forated for the dash-foot bolt. I am of the opinion the deepening of the depressions a' towards the depressions a, as forming a part of the combined swaging and welding die described in claim two of complainant's patent, contains invention.

Cross-examination by Mr. CHAS. M. PECK, for respondents:

X Ques. 15. I understand from your answer to question nine that the invention consists rather in the conception of the proper construction to be given to the corner of the dash frame made of different-shaped bars of iron than to the construction by an intelligent die-sinker of a pair of dies to do the predetermined work; am I right?

Ans. Having the desired corner of the dash frame in view, I regard the invention to consist rather in the conception of dies capable of producing their corner than in the mechanical work involved in constructing two dies.

X Ques. 16. Then, I understand you that the invention consists in the conception, after the desired form has been predetermined, of obtaining this form of a pair of dies; is that right?

Ans. After the desired form of the corner or, rather, the desired effects in making the corner, which in this case is the weld-
244 ing of two bars of iron of different sections, and of swaging or upsetting one of these bars, has been determined, then I regard the invention to consist rather in the conception of dies

which would accomplish this result, viz., to make the weld and swage one of the bars into the form of the desired corner, than in the mechanical work of sinking or forming the dies.

JOHN W. HILL.

Sworn to before me and subscribed in my presence this 11th day of March, A. D. 1885.

[SEAL.] JNO. W. STREHLI,
Notary Public and Special Examiner, Hamilton County, Ohio.

245 STATE OF OHIO, } ss:
County of Hamilton, }

I, John W. Strehli, a notary public within and for said county, selected to act as special examiner, under the 67th rule in equity, as amended, in the cause stated in the caption, do hereby certify that the foregoing examination was had pursuant to the annexed notice, at the office of Wm. Hubbell Fisher, # 13 Wiggins Bl'k, Cincinnati, Ohio, on M'ch ninth, tenth, and eleventh, A. D. 1885.

I further certify that at the said time and place I was attended by Richard G. Wood, James W. McCurley, and John W. Hill, witnesses produced on behalf of the complainant, they being of sound mind and lawful age, and the said witness- being, previously to the commencement of their deposition, by me first duly cautioned and solemnly sworn to testify the truth, the whole truth, and nothing but the truth, and the depositions hereinbefore appearing were by me reduced to writing in the presence of and read over by me to said witnesses and were thereupon subscribed by them in my presence.

246 I further certify that I am not of counsel nor attorney nor relative of either of the parties to this cause, nor in any manner interested in the result thereof.

In testimony whereof I have hereunto set my hand and affixed my seal of office this eleventh day of March, A. D. 1885.

[SEAL.] JNO. W. STREHLI,
Notary Public and Special Examiner, Hamilton County, Ohio.

Notary fees	$10 50
Witness	7 50
	18 00

Paid by complainant.

247 And afterward, to wit, on the day and year last aforesaid, came the said the complainant herein aforesaid, by his said solicitors aforesaid, and filed in the clerk's office of the court aforesaid in this cause certain depositions theretofore taken on behalf of said complainant, and which said depositions so as aforesaid filed are in the words and figures clothed as follows, to wit:

248 Circuit Court of the United States for the Southern District of Ohio. In Equity.

GEO. M. PETERS
vs.
THE ACTIVE MANUFACTURING COMPANY. } No. 3630.

The respondent will take notice that the complainant will examine witnesses in the above-named cause, under the 67th rule in equity, as amended, before Jno. W. Strehli, Esq., notary and special examiner, at the office of Wm. Hubbell Fisher, Esq., No. 13 Wiggins Bl'k, Cincinnati, Ohio, on Saturday, the fourteenth day of March, 1885, beginning said examination at 2 o'clock a. m. of said day and continuing from day to day until completed.

WM. HUBBELL FISHER,
Of Solicitors for Compl'ts.

Recieved copy M'ch 14, 1885.

STEM & PECK,
Solicitors for Respondent.

249 Circuit Court of the United States for the Southern District of Ohio. In Equity.

GEORGE M. PETERS
vs.
THE ACTIVE MANUFACTURING COMPANY. } No. 3630.

Examination of witnesses on behalf of the complainant, under the 67th rule in equity, as amended, pursuant to the annexed notice.

Present: Wm. Hubbell Fisher, for the complainant, and Chas. W. Peck, for the respondent.

By request of parties, it is ordered that the depositions be taken by question and answer.

JAMES W. MCCURLEY, a witness produced on behalf of the complainant, being recalled and first duly sworn, deposeth and saith, in answer to interrogatories propounded to him by WM. HUBBELL FISHER, Esq., of counsel for the complainant, as follows:

Ques. 1. Are you the James W. McCurley who formerly testified in this case?

Ans. I am.

Ques. 2. Referring to your deposition, given and signed by you on March 11th, 1885, and your answer to question No. 3 of that deposition, please explain about the dies and tongue or tongues
250 mentioned by you in that answer, and whether you mean to be understood that the dies had one or two tongues.

Ans. I should have more fully stated the fact that there were two dies, an upper die and a lower die; each had a groove for the oval bar and a groove for the lower or channel bar of the dash frame, the two grooves in each die coming together at right angles and forming a corner; in that groove of the upper die which received the channel bar there was a tongue running lengthwise in the groove

and leaving a portion of the groove at each side of it; in that groove in the lower die which received the channel bar there was a tongue running lengthwise in the groove and leaving a portion of the groove on each side of it. When the two dies came together the tongue of the upper die was opposite the tongue of the lower die; the width of each tongue was the width of the web in the channel bar; the upper surface of the tongue in the lower die was below the upper surface of the face of said die.

Cross-examination waived.

J. M. McCURLEY.

Sworn to before me and subscribed in my presence this 14th day of February, A. D. 1885.

[SEAL.] JOHN W. STREHLI,
Notary Public and Special Examiner, Hamilton County, Ohio.

251 STATE OF OHIO, }
County of Hamilton, } ss:

I, John W. Strehli, a notary public within and for said county, selected to act as special examiner, under the 67th rule in equity, as amended, in the cause stated in the caption, do hereby certify that the foregoing examination was had, pursuant to the annexed notice, at the office of Wm. Hubbell Fisher, Cincinnati, Ohio, on Saturday March 14th, A. D. 1885.

I further certify that at the said time and place I was attended by James W. McCurley, a witness produced on behalf of the complainant, he being of sound mind and lawful age, and the said witness being, previously to the commencement of his deposition, by me first duly cautioned and solemnly sworn to testify the truth, the whole truth, and nothing but the truth, and the deposition hereinbefore appearing was by me reduced to writing in the presence of and read over by me to said witness, and was thereupon subscribed by him in my presence.

I further certify that I am not of counsel nor attorney nor
252 relative of either of the parties to this cause, nor in any manner interested in the result thereof.

In testimony whereof I have hereunto set my hand and affixed my seal of office this 14th day of March, A. D. 1885.

[SEAL.] JNO. W. STREHLI,
Notary Public and Special Examiner, Hamilton County, Ohio.

Notary fee	$1 00
Witness	1 50
	$2 50

P'd by compl't.

253 And afterward, to wit, on the 19th day of March, in the year last aforesaid, came the said the complainant herein aforesaid, by his said solicitors aforesaid, and filed in the said the clerk's office of the court aforesaid in this cause certain depositions

theretofore taken on behalf of said complainant, and which said depositions so as aforesaid filed are clothed in the words and figures as follows, to wit:

254 Circuit Court of the United States for the Southern District of Ohio. In Equity.

GEORGE M. PETERS
vs.
THE ACTIVE MANUFACTURING COMPANY. } No. 3630.

The respondent will take notice that the complainant will examine witnesses in the above-named cause, under the 67th rule in equity, as amended, before Ira H. Crum, Esq., notary & special examiner, at the office of Jason W. Firestone, No. 85 South High street, Columbus, Ohio, on Friday, the thirteenth day of March, 1885, beginning said examination at 10 o'clock a. m. of said day and continuing from day to day until completed.

WM. HUBBELL FISHER,
Of Solicitors for Compl't.

Received copy March 11, '85.

STEM & PECK,
Solicitors for Respondent.

255 Circuit Court of the United States for the Southern District of Ohio. In Equity.

GEO. M. PETERS
vs.
THE ACTIVE MANUFACTURING COMPANY. } No. 3630.

Examination of witnesses on behalf of the complainant, under the 67th rule in equity, as amended, pursuant to the annexed notice.

Present: Jason W. Firestone, for the complainant, and ——— ———, for the respondent.

By request of parties, it is ordered that the depositions be taken by question and answer.

CHAS. M. PETERS, a witness produced on behalf of the complainant, being first duly sworn, deposeth and saith, in answer to interrogatories propounded to him by JASON W. FIRESTONE, Esq., of counsel for the complainant, as follows:

Ques. 1. State your name, age, residence, and occupation.

Answer. Charles M. Peters; age, thirty-seven years; residence Columbus, Ohio; manager of Peters Dash Company.

Ques. 2. How long have you been connected with the Peters Dash Company?

Ans. Ever since its organization.

256 Ques. 3. During that time have you or not been familiar with the kind of manufacturing done by said company and the machinery and dies used by them?

Ans. I have.

The further taking of this deposition is now continued until tomorrow, March 14th, '85, at 10 o'clock a. m.

IRA H. CRUM,
Notary Public.

Met pursuant to adjournment.
Present: Same parties.

IRA H. CRUM,
Notary Public.

Q. 4. Please examine the drawings of letters patent numbered 281,553, being Complainant's Exhibit No. 3, and state whether or not you ever saw dies in use like those illustrated in said drawings; and, if so, where and when and who, if you know, invented said dies.

Ans. Yes; I have seen them in use in the dash-frame making department of the Peters Dash Company, and they were first put in use in January, 1879, and have been in use there ever since in the manufacture of all their dash frames, and Mr. George M. Peters invented the dies in January, 1879, and they were first put in
257 use the same month, in the factory of the Peters Dash Company, of which firm George M. Peters is a member.

CHARLES M. PETERS.

The further *the further* taking of this deposition is adjourned to Monday, March 16th, 1885, at 10 o'clock a. m.

IRA H. CRUM,
Notary Public.

Met pursuant to adjournment.

IRA H. CRUM,
Notary Public.

Also OSCAR G. PETERS, of lawful age, being first duly sworn, deposes as follows, in answer to interrogatories propounded to him by Mr. JASON W. FIRESTONE:

Q. 1. State your name, age, residence, and occupation.

Ans. My name is Oscar G. Peters; age, 43; residence, Columbus, Ohio. I am associated with George M. Peters and Clinton D. Firestone, and we compose the firm of the Peters Dash Company.

Ques. 2. What relation, if any, are you to George M. Peters?

Ans. He is my brother.

Ques. 3. State, if you know, what the physical condition of George M. Peters now is, and is he now able to attend to business?

Ans. Mr. George M. Peters is now at his residence sick in
258 bed, and has been unable to leave his house for the last twelve days, his sickness being such that necessitated a very

painful surgical operation, and he has been during that time and still is unable to leave his bed.

OSCAR G. PETERS.

259 STATE OF OHIO, *County of Franklin,* } ss:

I, Ira H. Crum, a notary public within and for said county, selected to act as special examiner under the 67th rule in equity, as amended, in the cause stated in the caption, do hereby certify that the foregoing examination was had, pursuant to the annexed notice, at the office of Jason W. Firestone, No. 85 South High street, Columbus, Ohio, on Friday, the 13th day of March, A. D. 1885, and continued from day to day, as therein shown.

I further certify that at the said time and place I was attended by Charles M. Peters and Oscar G. Peters, witnesses produced on behalf of the complainant, they being of sound mind and lawful age, and the said witnesses were previously to the commencement of their depositions, by me severally duly cautioned and solemnly sworn to testify the truth, the whole truth, and nothing but the truth, and the depositions hereinbefore appearing were by me reduced to writing in the presence of and read over by me to said witness-, and were thereupon subscribed by said witnesses in my presence.

I further certify that I am not of counsel nor attorney nor relative of either of the parties to this cause, nor in any manner interested in the result thereof.

260 In testimony whereof I have hereunto set my hand and affixed my seal of office this 17th day of March, 1885.

[SEAL.] IRA H. CRUM,
Notary Public and Special Examiner.

Costs of Taking Depositions.

Witness fees:	
Charles M. Peters, two days--	3 00
Oscar G. Peters, one " --	1 50
Notary fees: I. H. Crum----	4 00
	8 50

Paid by plaintiff.

IRA H. CRUM,
Notary Public.

261 And afterward, to wit, on the 17th day of October, in the year last aforesaid, an entry was made upon the journal of the court aforesaid, and which said entry so as aforesaid made is clothed in the words and figures as follows, to wit:

GEORGE M. PETERS
vs.
THE ACTIVE MANUFACTURING CO. } In Equity. 3630.

This cause coming on to be heard upon the pleadings and proofs

and arguments of counsel for comp't and def't, and the court, being fully advised, finds that the letters patent sued on are void for want of invention; and it is ordered, adjudged, and decreed that the bill of complaint be, and the same is hereby, dismissed at comp't's costs, to be taxed.

Whereupon the said complainant, by his counsel, prays an appeal to the Supreme Court of the United States, and the court does allow said appeal, and fixes the amount of the appeal bond at five hundred dollars ($500).

262 And thereupon afterward, to wit, on the 11th day of November, in the year last aforesaid, came the said the complainant herein aforesaid, by his said solicitor aforesaid, and filed in the said the clerk's office of the court aforesaid in this cause his certain appeal bond, and which said appeal bond so as aforesaid filed is clothed in the words and figures as follows, to wit:

Appeal Bond.

Circuit Court of the United States, Southern District of Ohio, Western Division.

GEORGE M. PETERS
vs.
THE ACTIVE M'F'G CO. } No. 3630.

Know all men by these presents that we, George M. Peters and Gilbert H. Lounsberry, are held and firmly bound unto the Active Manufacturing Company in the sum of five hundred (500) dollars, to be paid to the said The Active Manufacturing Company or assigns; to which payment, well and truly to be made, we bind ourselves and each of us, jointly and severally, and our and each of our heirs, executors, and administrators, firmly by these presents.

Sealed with our seals. Dated this 11th day of November, 1885.

Whereas the above-named George M. Peters has taken an appeal to the Supreme Court of the United States to reverse the de-
263 cision rendered in the above-entitled action by the circuit court of the United States for the southern district of Ohio:

Now, therefore, the condition of this obligation is such that if the above-named George M. Peters shall prosecute his said appeal to effect and answer all damages and costs if he shall fail to make good his plea, then this obligation to be void; otherwise to remain in full force and virtue.

(Signed) GEORGE M. PETERS. [SEAL.]
(Signed) GILBERT H. LOUNSBERRY. [SEAL.]

(Signed) JNO. W. STREHLI,
(Signed) JOHN D. KILMER,
As to Gilbert H. Lounsberry.
(Signed) W. SCOTT JONES,
(Signed) CHAS. A. PEARCE,
As to George M. Peters.

The above security is approved.

(Signed) GEO. R. SAGE,
District Judge of the United States, S. D. Ohio,
Sitting as Circuit Judge in Above-Entitled Cause.

Oath of Surety Attached.

SOUTHERN DISTRICT OF OHIO, *ss:*

I, Gilbert H. Lounsberry, one of the sureties above-named, do solemnly swear that, after paying my just debts and liabilities, I am worth ten thousand dollars, in real estate, in my own name situate in the county of Hamilton, in said district.

(Signed) GILBERT H. LOUNSBERRY.

264 Sworn to before me the 11th day of Nov'b'r, 1885.

[L. S.] (Signed) ROB'T C. GEORGI,
Dep. Cl'k U. S. Cir. Court, S. D. O.

And afterward, to wit, on the day and year last aforesaid, was issued out of the clerk's office of the court aforesaid in this cause our certain citation herein, directed to the said defendant herein, the said The Active Manufacturing Company as aforesaid, and which said citation, with the return of the marshal of the district aforesaid serving said citation endorsed thereon as of December 8th, A. D. 1885, is hereto attached as follows, to wit:

265 *Citation.*

UNITED STATES OF AMERICA, *ss:*

To the Active Manufacturing Company, Greeting:

Whereas George M. Peters hath lately appealed to the Supreme Court of the United States from a decree lately rendered in the circuit court of the United States for the southern district of Ohio, made in favor of you, the said The Active Manufacturing Company, and has filed the security required by law, you are, therefore, hereby cited to appear before the said Supreme Court, at the city of Washington, on the second Monday of October next, to do and receive what may appertain to justice to be done in the premises.

Given under my hand, at the city of Cincinnati, in the sixth circuit, this 11th day of November, in the year of our Lord one thousand eight hundred and eighty-five.

GEO. R. SAGE,
U. S. District Judge, S. D. O.,
Sitting as Circuit Judge in Above-Entitled Cause.

266 [Endorsed:] 332. 11, 11, '85. United States circuit court, southern dist. of Ohio. No. 3630. George M. Peters *vs.* Active Man'f'g Co. Citation to appellee. Filed Dec. 8, 1885. B. R. Cowen, clerk.

Received this writ, at Cincinnati, Ohio, on the 11th day of November, 1885, and on the 19th day of November, 1885, I served the within-named The Active Manufacturing Company by delivering to E. W. Brownell, the president of said company, a true copy of this writ, with all the endorsements thereon, personally, and on the same day by delivering to George Montieth, the secretary thereof, a true copy of this writ, with all the endorsements thereon, personally.

H. C. UMER,
U. S. Marshal, S. D. O.,
By C. A. COSTELLO.

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267 UNITED STATES OF AMERICA, } ss:
Western Division of the Southern District of Ohio, }

I, B. R. Cowen, clerk of the circuit court of the United States within and for the district aforesaid, do hereby certify that the foregoing is a true and complete transcript of the record and proceedings in the cause therein named as the same appears of record and on file in this office.

In testimony whereof I have hereunto set my hand and affixed the seal of the court aforesaid, at the city of Cincinnati, this 30th day of December, A. D. 1885, and of the Independence of the United States of America the one hundred and tenth year.

[Seal of the Circuit Court, South'n Dist. of Ohio.]

B. R. COWEN,
Clerk U. S. Cir. Court, S. D. O.,
By ROB'T C. GEORGI, *Deputy.*

Endorsed on cover: S. Ohio C. C. U. S. No. 254. George M. Peters, appellant, *vs.* The Active Manufacturing Company. Filed April 16, 1886.

Office Supreme Court U. S.
FILED.
APR 16 1889
JAMES H. McKENNEY,
CLERK.

Supreme Court of the United States.

OCTOBER TERM, 1888.

No. 254.

GEORGE M. PETERS, Appellant,

vs.

THE ACTIVE MANUFACTURING CO.

Appeal from the Circuit Court of the United States for the Southern District of Ohio.

FILED APRIL 6, 1886.

BRIEF FOR APPELLANT, PETERS,

BY

WM. HUBBELL FISHER.

WASHINGTON, D. C.
GIBSON BROS., PRINTERS AND BOOKBINDERS.
1889.

U. S. Supreme Court.

GEORGE M. PETERS, APPELLANT,

v.

THE ACTIVE MANUFACTURING COMPANY.

No. 254.

BRIEF FOR APPELLANT.

May it please your Honors, this suit is brought upon letters-patent No. 281,553, granted to appellant July 17, 1883, for improvement in die for making dash frames.

The bill is in the usual form, alleging infringement and praying for an injunction and an account.

The answer denies infringement, and that it required invention, or the exercise of the inventive faculty, to apply or adapt dies to the making of dash-frames.

The Court below filed no written opinion, but the decree dismissed the bill on the ground that the letters-patent sued on were void for want of invention.

Appellant's invention consists briefly in an upper and lower die, each having two channels, one at right angles to the other, one of the channels of one or both of the dies having a longitudinal tongue, the said channels deepening as they approach the corner, viz., the point where

the channels meet, whereby a combined welding and swaging action is obtained.

The claim relied on here is the second, which is as follows:

"2. The combination, substantially as before set forth, "of the two dies having opposing angularly-joined de- "pressions a, a^1, and a tongue a^2, in the depression a^1, "of either or both dies, the depressions a^1 deepening "toward their junctions with the depressions a."

It is apparent that this claim is in effect for a pair of dies substantially as described, the depressions a^1 deepening toward the juncture with the depressions a.

In order to properly understand the nature of the controversy it is proper to state that ordinary lap welding, viz., laying the hot end of one iron on the hot end of another and forcing them to unite under blows or equivalent pressure, was old at date of complainant's invention. Complainant made his invention in 1879.

The invention does not consist in a mere die, nor in a die to make an article of a given shape, but is for a pair of dies adapted to *swage* as well as weld the bars together. It enables not only lap welding, preserving the channel form, but the additional feature of rolling, moving, or swaging the hot iron, pressing it to the corner, compacting it, and enabling a thin channel iron to be used with a thick oval bar and, at the same time, secure great strength at the corner where the channel iron and oval bar are joined. This additional feature is new as an element in the combination. Were it not for this last named feature the operation of using a thin channel iron in lap-welding and swaging to a thicker oval bar would be exceedingly difficult, and if performed at all would have to be performed in a subsequent operation by a separate and extra pair of swaging rolls, or the like.

The opening testimony of complainant made a *prima facie* case of infringement against defendant.

On this point Richard G. Wood testifies that he was in the employ of the defendant part of the winter of 1883–4 (folio 34); that he saw in constant use dies substantially like those shown in the Peters patent (folio 36), and produced full sized model of the dies (folio 37).

John Mestel and John Doyle testified to the same effect (folios 48 and 50).

The fact that the defendant's dies were found with the gradual deepening depression toward the jointure with angular bend is denied by the witness Montieth, an officer of defendant corporation, called on its behalf (folio 158), and he produces not the original dies in use, but castings (deft.'s Exhibit C) alleged to have been taken from dies then in use. He admits that defendant used other forms of dies, but denies that they contained the gradual deepening feature.

In rebuttal of this evidence, complainant took the testimony of two witnesses, Wood and McCurley, who swear most positively that the dies used by defendant in 1883 and 1884 had the gradual deepening feature.

As to this, Richard G. Wood (folio 220) testifies that he worked for defendant company part of the winter of 1883 and 1884; that he was familiar with the dies they were using at that time, before and since; that he *repaired* the dies, and that they had depressions deeper at one point than at another. "The depressions in the dies which re-
" ceived the channel-bar were gradually deepened toward
" the depressions that received the oval bar" (folio 221). He produces sketches of the defendant's dies, which are in evidence, marked "Wood Exhibit Upper Die Sketch" and "Lower Die Sketch" (fronting p. 90).

James McCurley examined the corner dies in use at de-

fendant's shops in Feb. 8, 1884. He testifies that the defendant's dies at the junction of the two grooves were of equal depth, and that from this point they each increased in depth (folio 230). He tested these depressions not simply by his eye, but by passing his finger along the groove, and he produces McCurley Exhibit sketch (printed fronting p. 93) illustrating the gradual widening of the metal. The testimony of Wood and McCurley was not attacked or rebutted by the defendant and must stand.

The witness Black testifies that he is familiar with the dies used by the defendant in 1879, and that defendant's Exhibit C is not capable of being used and the originals were not used as corner dies, but on the contrary were for the centre weld only (fol. 173). Lucius Walton testifies to the same effect (folio 183). The reason why the gradual deepening depressions are lacking in said Exhibit is thus accounted for. It was a misleading exhibit produced by the witness Montieth for the purpose of detracting the attention of the court from the real dies in controversy. The testimony of Montieth is therefore entitled to no weight in this cause.

The invention of Peters, so far as the record discloses anything to the contrary, is novel and useful.

The witness MOONEY, produced on the part of the complainant, testified that, in round numbers, seven hundred thousand dashes had been fabricated from dies made in accordance with the Peters invention; this from early in 1879 down to December, 1884 (folio 64).

As to the question of novelty, the complainant called John W. Hill, one of the foremost experts in the Middle States, and who superintended the erection of the new

pumping engines for the city of Cincinnati, and who has been consulted on behalf of the United States by the U. S. engineer department in care of the Ohio river. (See p. 94 of Record.

Upon that feature of the invention which relates to the deepening of the depressions a^1 toward their junction with the other depressions a, he says:

Folio 237. "The invention recited in claim two is similar "to the invention recited in claim one, excepting 'the de-"'pressions a^1 (in the two dies) deepen toward their junc-"'tion with the depressions a. The dies recited in this "'claim are designed to simultaneously weld together two "'bars of iron of different sections.'" * * *

And in answer to Q. 13 (folio 242) he says: "And the "deepening of the depressions a^1 toward the depressions "a, as recited in claim two, is to swage heads of the chan-"nel bar to an equal thickness with the oval bar at the "welded joint."

He further says, in answer to Q. 14:

"By reason of the deepening of the depressions a^1 "toward the depressions a, comparatively light channel "iron can be used for the lower rail of a dash frame, the "deepening of the depressions a^1 towards the depressions "a effecting an 'upset' of the metal in the heads or flanges "of the channel iron at that point where the greatest "strength and stiffness is required, viz., at the lower cor-"ner of the frame, where the web is to be punched or "perforated for the dash-foot bolt. I am of opinion the "deepening of the depressions a^1 towards the depressions "a, as forming a part of the combined swaging and weld-"ing die described in claim two of complainant's patent "contains invention."

On the other hand, the defendant produces three wit-

nesses for the purpose of denying that there was any invention in making the dies of the Peters patent. His testimony is of the most general character, and is in substance that it did not require invention to put a tongue in a die to preserve the shape of or to form a channel in an iron bar. But it is important to notice that each of the witnesses is *silent* as to whether or not a pair of dies effecting the twofold result of *swaging* and welding did require invention. The idea of swaging is not present with them.

The witness Brackett simply swears that any die sinker having two pieces of iron brought to him to have dies made for the purpose of welding them could do so. He cited an instance five or six years previous when dies were constructed with a tongue to preserve the form of a channel in one of the bars while being welded. He is asked definitely about them, and states that the "statements as regards these dies are made only from memory." He is not asked whether combined swaging and welding dies are old, neither is he interrogated as to the effect of the gradual deepening of the depressions a^1 towards the depressions a.

Murdock's testimony is certainly too indefinite for consideration.

With the exception of his age, and the time he has been in business, he gives no date.

For aught his testimony shows, the dies he made for defendant might have been made yesterday. He thinks one would without difficulty make dies like those shown in the Peters patent, and then on cross-examination admits he never *read* the patent.

And as the drawing, from the nature of the figures, does not show the gradual deepening depressions, he could not be testifying about that feature of the invention.

The witness Thomas' testimony is to very much the same effect, and is entitled to about the same weight.

In rebuttal of this negative testimony of the defendant's witnesses, the witnesses Doty, Mills, and Mullinger, called on behalf of complainant, testify most positively that in their experience as die-makers they had never seen tongues employed in welding dies; and as Mills swears on cross-examination, tongues were common expedients to make depressions in metal or preserve some shape, "but not to make a weld and form the depressions at the same time."

In addition to this evidence, complainant's expert, Hill, swears (folio 238, in answer to question 8) "the arrange-" ment of the angularly joined depressions a a^1 and the " tongue or tongues in depressions a, whereby the simulta-" neous performance of two separate and independent oper-" ations is accomplished; first, the welding together of two " iron bars of different sections, and, second, the recessing " of one of said bars. I was at one time very familiar with " the use and construction of swaging dies for gun and pis-" tol work, in which there were many odd forms for forging " body pieces, levers, and plugs of breech-loading fire-arms, " but I never before have seen dies which were at one oper-" ation capable of performing the double function of mak-" ing a weld of two bars of iron of different sections and re-" cessing one of the bars."

As the defendant's witnesses nowhere swear as to the swaging and welding functions of the dies of the patent, the second claim covering this feature is not attacked.

The presumption of the novelty of the invention of the second claim, evidenced by the grant of the patent, is nowhere rebutted, and therefore, at least so far as this case is concerned, must stand.

The defendant introduced in evidence the patent to Peters, No. 224,792, dated Feb. 24, 1880, probably with a view to anticipate the invention of the Peters patent in

suit, but as it is obviously for the structure of the dash, and not for combined welding and swaging dies for making a portion of the dash, it is not material to this case. Aside from this, its date is not anterior to the date of complainant's invention.

The only question remaining for discussion, if, indeed, it needs discussion, is the effect of the record made in the Patent Office during the prosecution of the application upon which the Peters patent in suit was granted. The defendant introduced in evidence a copy of the file wrapper and contents of said application, marked "Exhibit Respondent's Patent File" (pp. 31 to 58), from which it will be seen that the two questions raised by the Patent Office against the invention, as originally claimed, were that it was anticipated by two prior patents, and that, in view of the common use of swages by blacksmiths, it did not require invention to make a welding die to fabricate a given article.

While the file and contents show the claims as originally drawn were rejected on certain patents, none of which are in evidence, the grant of the patent is sufficient evidence that they were not pertinent. If the defendant intended to rely upon these patents, it was incumbent upon it to offer them in evidence, and to show to the complainant they anticipated the Peters invention.

The file and contents in evidence also show that the Patent Office withdrew from both of these positions, and granted the patent.

Here again the presumption drawn from the foregoing facts is in favor of the novelty of the invention.

Bearing in mind that the second claim of the Peters patent is for the feature of the gradually deepening depression of the grooves toward the corner, so far as its

novelty is concerned it is on all-fours with the case of Klein against Park (3 Ban. & Ard., 145), in which McKennan, Cir. J., said:

"The complainant's patent contains two claims, both of "which the defendants are alleged to have infringed. * * * "The second is for the dies by which this "method is in part effectuated, constructed as described "for drawing down the eye, substantially as shown.

"The original and distinguishing merit of the patentee's "invention consists in supplying *dies* of novel construc- "tion and form, and so adapted to forming the eyes of "picks by a new method, and in combining with the old "steps in forming the eyes of picks a new element, to wit, "drawing them down on a mandrel between rolling dies "which completely encompass the walls of the eye. The "result is the elongation of the walls of the eye as may be "desired, with uniform thickness as may be desired, and "the complete formation of the eye by the process of "rolling alone, leaving only such further manipulation as "may be necessary to give finish to the device.

"Under the proofs in this case this last step in the "manufacture is new, and therefore impresses upon the "*whole* method the character of *novelty*."

The complainant's invention gave an added function to a welding die, *i. e.*, swaging the metal as well as welding it, and without this the swaging would have to be performed by a separate and extra machine and in a subsequent operation.

There being no evidence in this case that combined welding and swaging dies were old at the date of complainant's invention, and there being evidence that this combination was new and useful, it results that your decision should be in favor of the validity of the second claim of the patent, reversing the decree of the court below as to that claim.

Respectfully submitted.

WM. HUBBELL FISHER.

APR 16 1889
JAMES H. MCKENNEY

Robert Clarke & Co., Printers, Cincinnati.] [April, 1889.

Supreme Court of the United States.

OCTOBER TERM, 1888.

George M. Peters,

Appellant,

No. 254.] *vs.*

The Active Manufacturing Company,

Appellee.

BRIEF FOR APPELLEE.

ARTHUR STEM,
Counsel for Appellee.

Robert Clarke & Co., Printers, Cincinnati.] [April, 1889.

Supreme Court of the United States.

OCTOBER TERM, 1888.

George M. Peters,

Appellant,

No. 254.] *vs.*

The Active Manufacturing Company,

Appellee.

BRIEF FOR APPELLEE.

This suit was brought by George M. Peters, appellant, on letters patent No. 281,553, granted July 17, 1883, for "a new and useful improvement in dies for making dash frames," and appellee is charged with having infringed by using similar dies for welding dash frames manufactured by it.

The defense relied upon is want of invention in all the claims. Infringement of the first claim is not denied, and although we submit no infringement of the other three claims is shown, the same defense applies to all the claims alike.

In the manufacture of metallic frames for carriage dashes, it is customary, in order to form a perfect joint, to weld the end bars to the horizontal bars; and in order that the shape of the bars may be preserved, dies are used having depressions of the shape to be retained by the welded

parts, so that the action of the welding hammer will not flatten out the iron and destroy its form. One of the dies is usually placed on an anvil, and where a trip hammer is used the other die is placed in the face of the hammer, as the hammer always strikes in the same place, and may be relied upon to bring the upper die down on the lower die at the proper place. The metal pieces to be welded, having been heated, are laid on the lower die in the position desired, and the hammer carrying the upper die brought down on them, forcing the two pieces of metal together between the dies, when they of course and of necessity take the shape of the dies.

The so-called invention of Geo. M. Peters consists in devising dies to preserve the shape of the end bars and bottom rail of metallic dash frames when the bottom rail is made of what is called channeled iron—that is, iron having a longitudinal depression or channel.

As a first proposition, we submit that it is perfectly obvious that, in order to preserve the channel in the bottom rail at the point of the weld, the die must be provided with a tongue to fit into this channel, to prevent its being obliterated or filled up by the metal being forced into it under the pressure or blow used to weld the two pieces together. Secondly, we hold that it is equally manifest that, if it is desired to make the welded parts thicker immediately at the angle formed by the end bar and bottom rail, the depression in the dies must be inclined so that it is deeper at the angle.

These two propositions seem to us self-evident; yet it is upon their alleged discovery that Geo. M. Peters bases his rights in this action, and in their application that his entire invention consists.

The claims of his patent are:

1. The combination, substantially as above set forth, of the two dies having opposing angular joined depressions aa^1, and a tongue a^2 in the depression a^1 of either or both dies.

2. The combination, substantially as above set forth, of the two dies having opposing angular joined depressions

aa^1, and a tongue a^2 in the depression a^1 of either or both dies, the depressions a^1 deepening toward their junctions with the depressions a.

3. The combination, substantially as above set forth, of the dies having opposing angularly joined depressions aa^1, and a tongue a^2 in either or both of the said depressions, the face of said tongue or tongues being inclined.

4. The combination, substantially as above set forth, of the dies having opposing angularly joined depressions, aa^1, and a tongue a^2 in either or both of the said depressions, the depressions a^1 deepening toward their junction with the depression a, and the face of the tongue or tongues being inclined.

The first claim covers substantially the use of the tongue to occupy the channel in the iron. The other three claims cover the deepening of the depression in the dies and the inclination of the surface of the tongue, to make the portion of the welded parts at the angle thicker.

The first claim is the only one which can on its face be held to be infringed, as the evidence of the infringement of the other claims, we submit, is not sufficient; but the same defense applies to all alike, so they may be considered together.

What there is in complainant's invention is shown in the testimony of complainant's own witness, Lucius Walton, who had been for a number of years foreman in the dash frame making department of the complainant's company, the Peters Dash Company.

He says (Record pp. 71 and 72): "That he has welded thousands of dash frames by using dies; that when the lower bar was flat bar iron and end bars oval iron he used dies with plain gutters or grooves to receive the flat and oval iron; that with these flat bottom bars it was a difficult matter to punch holes through the bar to receive the bolts for the dash feet, and that Mr. Peters got up the idea of using channel bar iron for the lower bar of the dash frame, so that they could punch the hole or slot to receive the bolt more easily." And continuing, A. 11, he says: "After substituting channel iron for flat bar for the lower

bar we found that our plain dies were inoperative—they would not do to make a proper weld—for when attempting to make a corner weld with our old dies with plain grooves we found that in making the weld the metal would flow away from the corner and fill up the channel of the iron and make an imperfect weld, because when heated the iron would flow away from the corner where the strength is required. Mr. George Peters then invented the dies now in use with a tongue in the die. This tongue fits into the channel of the channel bar iron, and in making the weld keeps the channel perfect and from filling with metal, and prevents it, and forces the iron out to the corner and makes a complete weld."

Is it not evident from this testimony that the improvements supposed to be originated by George M. Peters consisted in the substitution of channel iron for bar iron in the bottom rail, and that the change of dies from the plain grooved to the tongued form was the obvious and necessary accompaniment of the change of form in the iron?

It was not new to make dash frames with channel iron. (Peters patent of 1880, Def'ts Exhibit, Dash Patent, Record p. 62).

It was not new to weld channel iron to flat or oval bars of iron. (Deposit of Brackett, Record pp. 27–31, and files of patent, Record p. 31).

It was not new to use dies or swages for welding two pieces of iron. (Deposition of Brackett, p. 28; deposition of Murdock and Thomas, pp. 58, 59 and 60).

How, then, by any stretch of the imagination, can there be held to be any invention in adapting the form of the dies to the shape to be obtained?

Every blacksmith is in the habit of using dies or swages of different forms for welding iron, to give the pieces joined the desired shape. The form and construction of dies or swages is analogous to molds for casting or molding, the only difference being that in one case the metal or substance to be molded is in a liquid state when poured into the mold; in the other it is a plastic state, and

is forced by pressure to take the shape of the mold or die.

The fact that a die is used as a swage, that is, in welding two pieces of metal together, does not affect its nature or character. Dies for making pats of butter, or for coining a gold dollar, operate in precisely the same manner as a die for welding together two pieces of metal; that is, they force the substance between the dies to conform to the shape of the dies, and any surplus material is pressed out and away. The fact that the parts pressed together become united or welded is the same in butter as in metal, and is the same whether a die is used or not. It is the pressure that makes the weld, regardless of the form of the mold or die.

The art of die making, like the art of casting, is simply skill in making the dies conform to the shape they are desired to produce. They are either cameo or intaglio, or cameo and intaglio. A cameo die is made with the figure or form in relief, so that when it is pressed upon a plastic substance, it leaves the figure or form engraved or hollowed out, as in an ordinary seal. An intaglio die is the opposite of a cameo; that is, one in which the figure is engraved or hollowed out in the die itself, so that when pressed upon a plastic substance, it leaves the figure in relief or cameo. A cameo and intaglio die, or, as more commonly described, a male and female die, is used for shaping sheet metal; one die being in relief, and the other engraved or hollowed out to receive the cameo die, so that the sheet of metal pressed between them shows on one side the figure in relief, and on the other side hollowed out. The dies used in swaging or welding are usually intaglio, as in this case. The manner of making them is not badly described by complainant's witness, Wm. Mullenger (Record, pp. 86, 87), who says in substance that he welds two pieces of iron together and shapes them up just as he wants them, then cuts out the dies until they just fit the iron. He then puts the dies in the hammer and tries them until he gets them just right. This is all there is in it. A

skilled die-maker would make the dies with fewer trials than Mr. Mullenger, but the process is the same. It is simply cutting out the dies to the shape desired. If the metal were intended to be thicker at the angle of the weld, the depression of the die would have to be deeper.

If Mr. Peters had produced some new design or shape in metal-working, he might have been entitled to a patent for his novel design or shape, and might have enjoined defendant from making or selling dies for forging his new design, but the invention would be in the design—not in making the dies. The shape being known, any one could make the dies.

A die might be made by simply taking the shape in plaster and using the plaster, when hard, as a mold for casting a metal die. In that case I would be stealing his design, but I would not be inventing a die.

In this case, however, Mr. Peters's patent is not for the design in metal. That was old. His form of dash frame is not novel in any feature, nor is it claimed to be here. The defendant, when it had its dies made, simply took the two pieces of iron, Defendant's Exhibits A and B, to a die sinker and told him to make a die for swaging them as they were—that is, so as to preserve the channel. In cutting out the dies, the die sinker left a tongue to fit into the channel of one piece, so as to preserve its shape and prevent its being flattened out by the blow which made the weld.

Three practical iron workers, witnesses for defendant, besides one witness for complainant, have testified that any die maker could have made the defendant's dies without the slightest difficulty, and that there is no invention or discovery whatever involved.

Complainant has taken a number of depositions to show that such dies are very useful in welding channel and oval iron together, and they doubtless are; but that is not an issue in this case, and gives Mr. Peters no claim to a monopoly.

The testimony of several witnesses that they never

saw dies with tongues is absurd, for every depression in any plastic substance, made by a die, is made by a tongue, or projection in the die, which is the equivalent. The shape of it matters not.

ARTHUR STEM,
Counsel for Appellee.